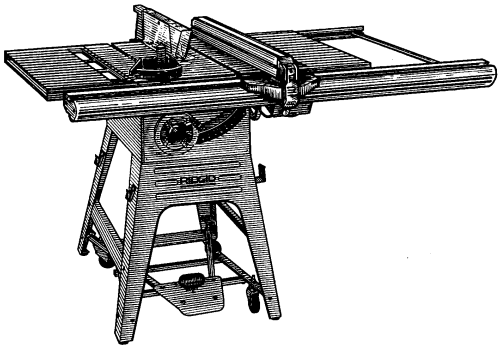
.SP6498 Belt Drive Saw 05/03 7/15/03 7:04 AM Page 1

RIDGID®

TS3650

OPERATORS MANUAL



10" CAST IRON
TABLE SAW

Call Us 1st

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- Operation
- Warranty (See back cover)
- Technical Assistance
- Repair Parts

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POWER TOOL PARTS & ACCESSORIES

⚠ WARNING:
For Your Own Safety Read Operator's Manual Before Operating Saw.

Part No. SP6498

Printed in Taiwan

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Safety Instructions For Table Saw

Safety is a combination of common sense, staying alert and knowing how your table saw works. Read this manual to understand this table saw.

Safety Signal Words

DANGER: means if the safety information is not followed someone will be seriously injured or killed.

WARNING: means if the safety information is not followed someone could be seriously injured or killed.

CAUTION: means if the safety information is not followed someone may be injured.

Before Using The Saw

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

Lead from lead-bases paints

- **Crystalline silica from bricks and cement and other masonry products, and**
- **Arsenic and chromium from chemically-treated lumber.**

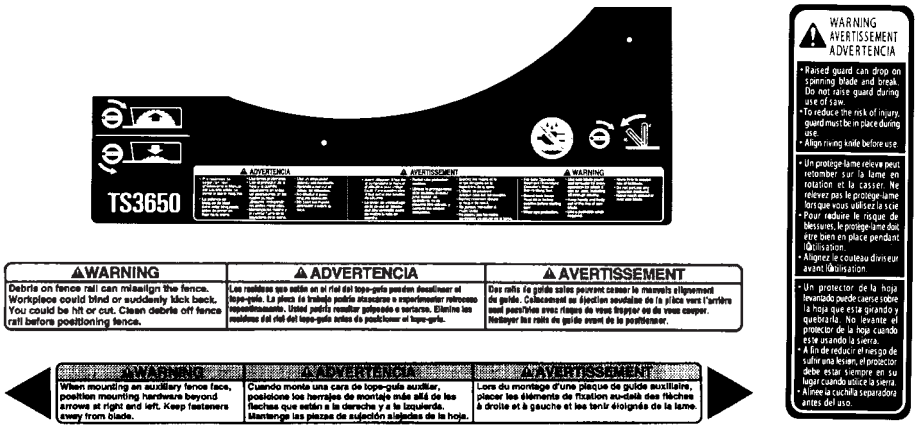
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

WARNING: To reduce the risk of mistakes that could cause serious, permanent injury, do not plug the table saw in until the following steps have been satisfactorily completed.

- Completely assemble and align saw (See “Assembly” section).
- Learn the use and function of the ON-OFF switch, blade guard, spreader, anti-kickback device, miter gauge, rip fence, table insert, blade elevation and blade tilt controls (See “Getting to Know Your Table Saw” section).
- Review and understand all safety instructions and operating procedures in this manual.
- Review the maintenance methods for this saw (See “Maintaining Your Table Saw” section).

Safety Instructions For Table Saw (continued)

- Find and read all the warning labels found on the saw (shown below).


TS3650
⚠ ADVERTENCIA
⚠ AVERTISSEMENT
⚠ WARNING
⚠WARNING
Debris on fence rail can misalign the fence. Workpiece could bind or suddenly kick back. You could be hit or cut. Clean debris off fence rail before positioning fence.
⚠ ADVERTENCIA
Los residuos que estén en el riel del tope-guía pueden desalinear el tope-guía. La pieza de trabajo podría atascarse o repentinamente retroceso repentinamente. Usted podría resultar golpeado o cortarse. Elimine los residuos del riel del tope-guía antes de posicionar el tope-guía.
⚠ AVERTISSEMENT
Des rebis de guide sales peuvent causer le mauvais alignement du guide. L'ebcasement se éjection soudaine de la pièce vers l'arrière sont possibles avec risque de vous frapper ou de vous couper. Nettoyer les rebis de guide avant de la positionner.
⚠WARNING
When mounting an auxiliary fence face, position mounting hardware beyond arrows at right and left. Keep fasteners away from blade.
⚠ ADVERTENCIA
Cuando monte una cara de tope-guía auxiliar, posicione los herrajes de montaje más allá de las flechas que estén a la derecha y a la izquierda. Mantenga las piezas de sujeción alejadas de la hoja.
⚠ AVERTISSEMENT
Lors du montage d'une plaque de guide auxiliaire, placer les éléments de fixation au-delà des flèches à droite et à gauche et les tenir éloignés de la lame.
⚠ WARNING
⚠ AVERTISSEMENT
⚠ ADVERTENCIA
• Raised guard can drop on spinning blade and break. Do not raise guard during use of saw.
• To reduce the risk of injury, guard must be in place during use.
• Align riving knife before use.
• Un protège-lame relevé peut retomber sur la lame en rotation et la casser. Ne relevez pas le protège-lame lorsque vous utilisez la scie
• Pour réduire le risque de blessures, le protège-lame doit être bien en place pendant l'utilisation.
• Alignez le couteau diviseur avant l'ébinisation.
• Un protector de la hoja levantado puede caerse sobre la hoja que esta girando y quebrarla. No levante el protector de la hoja cuando esté usando la sierra.
• A fin de reducir el riesgo de sufrir una lesión, el protector debe estar siempre en su lugar cuando utilice la sierra.
• Alinee la cuchilla separadora antes del uso.

When Installing Or Moving The Saw

Reduce the Risk of Dangerous Environment.

- Use the saw in a dry, indoor place protected from rain.
- Keep work area well lighted.
- Use recommended accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

T**o reduce the risk of injury from unexpected saw movement.**

- Bolt or clamp the saw to firm level surface where there is plenty of room to handle and properly support the workpiece (See "Assembly-Mounting Your Saw" section).
- Support the saw so the table is level and the saw does not rock.
- When using a table extension longer than 12" attached to any side of the saw, bolt the saw to a stationary surface or prop up the outer end of the extension from the floor or bench top to keep the saw from tipping.
- Put the saw where neither operator nor bystanders must stand in line with the sawblade.
- To reduce the risk of injury from electrical shock, make sure your fingers do not touch the plug's metal prongs when plugging in or unplugging the saw.
- Never Stand On Tool. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

Before Each Use

Inspect your saw.

- To reduce the risk of injury from accidental starting, turn the switch off, unplug the saw, and remove the switch key before raising or removing the guard, changing the cutting tool, changing the setup, or adjusting anything. Make sure switch is in OFF position before plugging in.

- Check for alignment of moving parts, binding of moving parts, breakage of parts, saw stability, and any other conditions that may affect the way the saw works.
- If any part is missing, bent or broken in any way, or any electrical part does not work properly, turn the saw off and unplug the saw.
- Replace damaged or missing parts before using the saw again.
- Use the sawblade guard, spreader and anti-kickback pawls for any thru-sawing (whenever the blade comes through the top of the work-piece). Make sure the anti-kickback pawls work properly. Make sure the spreader is in line with sawblade (See "Assembly-Aligning Blade Guard" section).
- Remove adjusting keys and wrenches. Form a habit of checking for and removing keys and adjusting wrenches from table top before turning saw on.
- Make sure all clamps and locks are tight and no parts have excessive play.

To Reduce the Risk of Injury From Jams, Slips Or Thrown Pieces (Kickbacks Or Throwbacks)

Inspect Your Blade.

- Choose the right blade or cutting accessory for the material and the type of cutting you plan to do.
- Use The Right Tool. Don't force tool or attachment to do a job it was not designed for.
- Never use grinding wheels, abrasive cutoff wheels, friction wheels (metal cutting blades) wire wheels or buffing wheels. They can fly apart explosively.
- Cut only wood, wood like or plastic materials. Do not cut metal.
- Choose and inspect your cutting tool carefully:
- To reduce the risk of cutting tool failure and thrown shrapnel (broken pieces of blade), use only 10" or smaller blades or other cutting tools marked for speeds of 5000 rpm or higher.
- Always use unbroken, balanced blades designed to fit this saw's 5/8 inch arbor.
- When thru-sawing (making cuts where the blade comes through the workpiece top), always use a 10 inch diameter blade. This keeps the spreader closest to the blade.
- Do not over tighten arbor nut. Use arbor wrenches to tighten it securely.
- Use only sharp blades with properly set teeth. Consult a professional blade sharpener when in doubt.
- Keep blades clean of gum and resin.
- Never use the saw without the proper table insert.
- Inspect your work area
- Keep work area clean.
- Cluttered areas and benches invite accidents. Floor must not be slippery from wax or sawdust.
- To reduce the risk of burns or other fire damage, never use the saw near flammable liquids, vapors or gases.
- To reduce the risk of injury, don't do layout, assembly, or setup work on the table while blade is spinning. It could cut or throw anything hitting the blade.

Safety Instructions For Table Saw (continued)

Plan your work

- Use the right tool. Don't force tool or attachment to do a job it was not designed for.

Inspect your workpiece.

- Make sure there are no nails or foreign objects in the part of the workpiece to be cut.
- When cutting irregularly shaped workpieces, plan your work so it will not slip and pinch the blade:
- A piece of molding for example, must lie flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut. Use jigs or fixtures where needed to prevent workpiece from shifting.
- Use a different, better suited type of tool for work that can't be made stable.

Plan your cut

- To reduce the risk of kickbacks and throwbacks - when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw:
- Never cut **Freehand**. Always use either a rip fence, miter gauge or fixture to position and guide the work, so it won't twist or bind on the blade and kick back.
- Make sure there's no debris between the workpiece and its supports.
- Use extra caution with large, very small or awkward workpieces.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top. Never use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic saw table, or to help feed, support or pull the workpiece.
- Never confine the piece being cut off, that is, the piece not against the rip fence, miter gauge or fixture. Never hold it, clamp it, touch it, or use length stops against it. It must be free to move. If confined, it could get wedged against the blade and cause a kickback or throwback.
- Never cut more than one workpiece at a time.
- Never turn your table saw "ON" before clearing everything except the workpiece and related support devices off the table.

Plan Ahead To Protect Your Eyes, Hands, Face and Ears

Dress for safety

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To reduce the risk of possible hearing damage, wear ear plugs or muffs when using table saw for hours at a time.
- Any power saw can throw foreign objects into the eyes. This can result in permanent eye damage. Always wear safety goggles, not glasses complying with ANSI Z87.1 (or in Canada CSA Z94.3-99) shown on package. Everyday eyeglasses have only impact resistant lenses. They are not safety

glasses. Safety goggles are available at many local retail stores. Glasses or goggles not in compliance with ANSI or CSA could seriously hurt you when they break.

- For dusty operations, wear a dust mask along with safety goggles.

Plan the way you will push the workpiece through.

- **Never pull the workpiece through.** Start and finish the cut from the front of the table saw.
- Never put your fingers or hands in the **path** of the sawblade or other cutting tool.
- **Never reach in back** of the cutting tool with either hand to hold down workpiece, support the workpiece, remove wood scraps, or for any other reason.
- To reduce the risk of hand positions where a sudden slip could cause fingers or hand to move into a saw-blade or other cutting tool.
- Don't overreach. Always keep good footing and balance.
- Push the workpiece against the rotation of the blade, never feed material into the cutting tool from the rear of the saw.
- Always push the workpiece all the way past the sawblade.
- As much as possible, keep your face and body to one side of the sawblade, out of line with a possible kickback or throwback.
- Set the cutting tool as low as possible for the cut you're planning.

Reduce the Risk of Accidental Starting

- Make sure switch is "OFF" before plugging saw into a power outlet.

Whenever Sawblade Is Spinning

WARNING: Don't allow familiarity (gained from frequent use of your table saw) to cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

- Before actually cutting with the saw, watch it while it runs for a short while. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting the problem.
- Make sure the top of the arbor or cutting tool turns toward the front of the saw.

Keep Children Away.

- Keep all visitors a safe distance from the table saw.
- Make sure bystanders are clear of the table saw and workpiece.

Don't Force Tool.

- Let the blade reach full speed before cutting.
- It will do the job better and safer at its designed rate.
- Feed the workpiece into the saw only fast enough to let the blade cut without bogging down or binding.

Before freeing jammed material.

- Turn switch "OFF".
- Wait for all moving parts to stop.
- Unplug the saw.
- Check blade, spreader and fence for proper alignment before starting again.

Safety Instructions For Table Saw (continued)

- To reduce the risk of throwback of cut off pieces.
- Use the guard assembly.

To remove loose pieces beneath or trapped inside the guard.

- Turn saw "OFF".
- Remove switch key.
- Wait for blade to stop before lifting the guard.

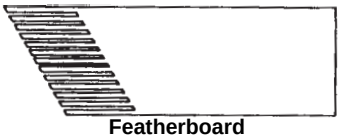
Before Leaving The Saw.

- Turn the saw off.
- Wait for blade to stop spinning.
- Unplug the saw.
- Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

Additional Safety Instructions For:

Rip Type Cuts.

- Never use the miter gauge when ripping.
- Use a push stick whenever the fence is 2 inches or more from the blade.
- When thru-sawing, use an auxiliary fence and push block whenever the fence must be between 1/2 and 2 inches from the blade.
- Never thru-saw rip cuts narrower than 1/2 inch. (See "Basic Saw Operations-Ripping and Bevel Ripping" sections.)
- Never rip anything shorter than 10" long.
- When using a push stick or push block, the trailing end of the board must be square. A push stick or block against an uneven end could slip off or push the work away from the fence.
- A Featherboard can help guide the workpiece. (see "Basic Saw Operation-Using Featherboards for Thru-Sawing." section)
- Always use featherboards for any non thru rip type cuts. (See "Basic Saw Operations - Using Feather-boards for Non-Thru Sawing" section).



Featherboard
See "Work Feed Devices" section for Material and Dimensions

Before Starting.

- To reduce the risk of kickbacks and slips into the blade, make sure the rip fence is parallel to the sawblade.
- Before thru-sawing, check the anti-kickback pawls. The pawls must stop a kickback once it has started. Replace or sharpen anti-kickback pawls when points become dull. (See "Maintaining Your Table Saw - Anti-Kickback Pawls" section.)
- Plastic and composition (like hard-board) materials may be cut on your saw. However, since these are usually quite hard and slippery, the anti-kickback pawls may not stop a kick-back. Therefore, be especially careful in your setup and cutting procedures.

While Thru-sawing.

- To reduce the risk of kickbacks and slips into the blade, always push forward on the section of the work-piece between the sawblade and the rip fence. Never push forward on the piece being cut off.

Additional Safety Instructions For:

Crosscut Type Cuts.

- Never use the rip fence when cross-cutting.
- An auxiliary wood facing attached to the miter gauge can help prevent workpiece twisting and throwbacks. Attach it to the slots provided. Make the facing long enough and big enough to support your work. Make sure, however, it will not interfere with the sawblade guard.

Before Starting

- Use jigs or fixtures to help hold any piece too small to extend across the full length of the miter gauge face during the cut. This lets you properly hold the miter gauge and workpiece and helps keep your hands away from the blade.

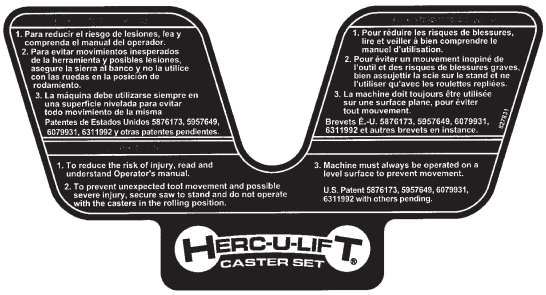
While Cutting

- To reduce the risk of blade contact, always hold the miter gauge as shown in “Basic Saw Operations - Using The Miter Gauge”.

Additional Safety Instructions For Herc-U-Lift™ Caster System:

Before Using the Caster System

Read the following warning located on the plate assembly:


1. Para reducir el riesgo de lesiones, lea y comprenda el manual del operador.
2. Para evitar movimientos inesperados de la herramienta y posibles lesiones, asegure la sierra al banco y no la utilice con las ruedas en la posición de rodamiento.
3. La máquina debe utilizarse siempre en una superficie nivelada para evitar todo movimiento de la misma
Patentes de Estados Unidos 5876173, 5957649, 6079931, 6311992 y otras patentes pendientes.
1. Pour réduire les risques de blessures, lire et veiller à bien comprendre le manuel d'utilisation.
2. Pour éviter un mouvement inopiné de l'outil et des risques de blessures graves, bien assujettir la scie sur le stand et ne l'utiliser qu'avec les roulettes repliées.
3. La machine doit toujours être utilisée sur une surface plane, pour éviter tout mouvement
Brevets É.-U. 5876173, 5957649, 6079931, 6311992 et autres brevets en instance.
1. To reduce the risk of injury, read and understand Operator's manual.
2. To prevent unexpected tool movement and possible severe injury, secure saw to stand and do not operate with the casters in the rolling position.
3. Machine must always be operated on a level surface to prevent movement.
U.S. Patent 5876173, 5957649, 6079931, 6311992 with others pending.
HERC-U-LIFT
CASTER SET

To reduce the risk of injury from unexpected tool movement.

- Check to make sure tool does not move prior to use. If tool moves, adjust all four leveler feet to support the tool.
- the tool on a firm level surface where there is plenty of room to handle and properly support the workpiece.

Glossary of Terms for Woodworking

Anti-Kickback Pawls

Device which, when properly maintained, is designed to stop the workpiece from being thrown towards the front of the saw at the operator during ripping operation.

Arbor

The shaft on which a cutting tool is mounted.

Bevel Cut

An angle cutting operation made through the face of the workpiece.

Compound Cut

A simultaneous bevel and miter crosscutting operation.

Crosscut

A cutting operation made across the width of the workpiece.

Glossary of Terms for Woodworking (continued)

Dado

A non thru cut which produces a square sided notch or trough in the workpiece.

Featherboard

A device which can help guide work-pieces during rip type operation.

Freehand

Performing a cut without the use of fence (guide), miter gauge, fixture, hold down or other proper device to prevent the work-piece from twisting during the cutting operation. Twisting of the workpiece can cause it to be thrown.

Gum

A sticky, sap based residue from wood products.

Heel

Misalignment of the sawblade such that the blade is not parallel to the miter gauge groove.

Kerf

The amount of material removed by the blade in a through cut or the slot produced by the blade in a non-through or partial cut.

Kickback

An uncontrolled grabbing and throwing of the workpiece back toward the front of the saw.

Leading End

The end of the workpiece which, during a rip type operation, is pushed into the cutting tool first.

Miter Cut

An angle cutting operation made across the width of the workpiece.

Molding

A non through cut which produces a special shape in the workpiece used for joining or decoration.

Ploughing

Grooving with the grain the length of the workpiece, using the fence. (A type of non-through cut.)

Push Stick

A device used to feed the workpiece through the saw during narrow ripping type operations which helps keep the OPERATORS hands well away from the blade.

Push Block

A device used for ripping type operations too narrow to allow use of a push stick.

Rabbet

A notch in the edge of a workpiece. (A type of non-through cut).

Resin

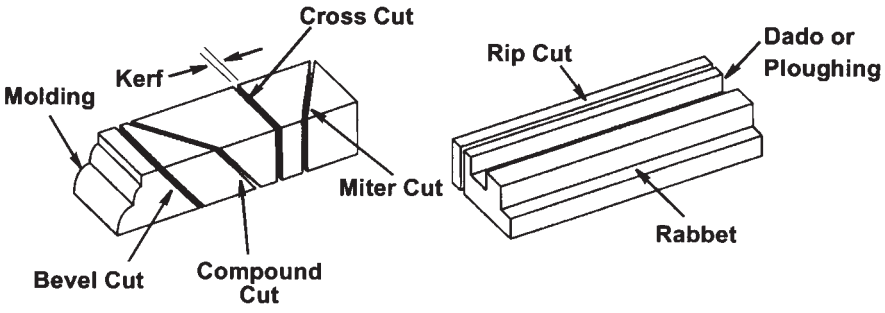
A sticky, sap based substance that has hardened.

Revolutions Per Minute (RPM)

The number of turns completed by a spinning object in one minute.

Rip Cut

A cutting operation along the length of the workpiece.



Sawblade Path
The area of the workpiece or table top directly in line with either the travel of the blade or the part of the workpiece which will be, or has been, cut by the blade.

Set
The distance that the tip of the sawblade tooth is bent (or set) outward from the face of the blade.

Throw-Back
Throwing of pieces in a manner similar to a kickback.

Thru-Sawing
Any cutting operation where the blade extends completely through the thickness of the workpiece.

Trailing End
The workpiece end last cut by the blade in a ripping operation.

Workpiece
The item on which the cutting operation is being performed. The surfaces of a work-piece are commonly referred to as faces, ends, and edges.

Motor Specifications and Electrical Requirements

Power Supply and Motor Specifications

WARNING: To reduce the risk of electrical hazards, fire hazards or damage to the tool, use proper circuit protection. Your tool is wired at the factory for operation using the voltage shown. Connect tool to a power line with the appropriate voltage and a 15-amp branch circuit. Use a 15-amp time delay type fuse or circuit breaker. To reduce the risk of shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

The A-C motor used on this tool is a totally enclosed fan cooled (TEFC) capacitor start, capacitor run non-reversible type, having the following specifications. It is wired at the factory for operation on 110-120v AC, 60 Hz. service.

	Wired for 120V	Wired for 240V
Rated H.P	1-1/2	1-1/2
Voltage	110-120	220-240
Amperes	13	6.5
Hertz (Cycles)	60	50/60
Phase	Single	Single
RPM	3450	2875 (50 Hz)/ 3450 (60 Hz)
Rotation of Shaft	Clockwise	Clockwise

General Electrical Connections

WARNING: To reduce the risk of electrocution:
1. **Use only identical replacement parts when servicing. Servicing should be performed by a qualified service technician.**
2. **Do not use in rain or where floor is wet.**
   This tool is intended for indoor residential use only.

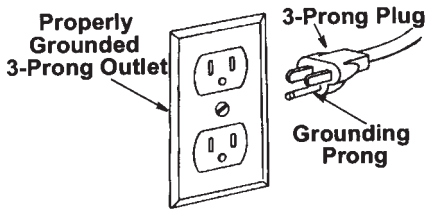
WARNING: Do not permit fingers to touch the terminals of plug when installing or removing the plug to or from the outlet.

Motor Specifications and Electrical Requirements (continued) — 110-120 Volt, 60 Hz. Tool Information

The plug supplied on your tool may not fit into the outlet you are planning to use. Your local electrical code may require slightly different power cord plug connections. If these differences exist refer to and make the proper adjustments per your local code before your tool is plugged in and turned on.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug, as shown. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.



Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

If the grounding instructions are not completely understood, or if you are in doubt as to whether the tool is properly grounded check with a qualified electrician or service personnel.

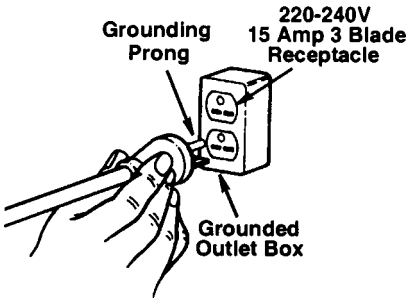
WARNING: If not properly grounded, this tool can cause an electrical shock, particularly when used in damp locations, in proximity to plumbing, or out of doors. If an electrical shock occurs there is the potential of a secondary hazard, such as your hands contacting the sawblade.

Changing Motor Voltage

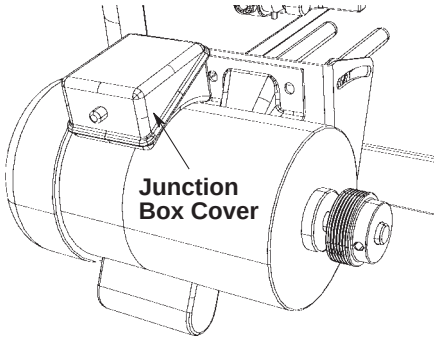
WARNING: Electric shock can kill. To reduce the risk of shock, never connect plug to power source outlet until all assembly steps are completed. Unplug saw before making or changing any connections.

NOTE: The saw is prewired at the factory for 120V operation. Use the following procedure to change motor voltage from 120V to 240V.

1. Unplug the saw.
2. Open the motor junction box cover located on the side of the motor.
3. Remove and discard the electrical tape from the wire connectors. Remove wire connectors.
4. Reconnect the leads as shown in the “Wiring Diagram” section on page 71 of this manual.
5. Reinstall the wire connectors and wrap with two layers of new U.L. listed electrical tape per wire connector.



6. Recheck your wiring to the wiring diagrams. Do this so you can be sure that the wiring is correct.
7. Reinstall the junction box cover.
8. Cut off the 120 volt power cord plug and replace it with a (3 blade) 240 volt, 15 amp U.L. listed plug. (See illustration of 240V plug & receptacle.) Connect the power cord white and black leads, respectively, to the “hot” plug blade terminals and connect the power cord green grounding wire to the plug ground prong terminal.
9. Plug your saw into a 220-240V, 15 amp, 3 blade receptacle.
10. Make certain the receptacle is connected to a 240V A.C. power supply through a 240V branch circuit having at least a 15 amp capacity and protected by a 15 amp time-delay fuse of circuit breaker.



Motor Specifications and Electrical Requirements (continued) —

Motor Thermal Overload Protector

CAUTION: To reduce the risk of motor damage, this motor should be blown out or vacuumed frequently to prevent sawdust buildup which will interfere with normal motor ventilation.

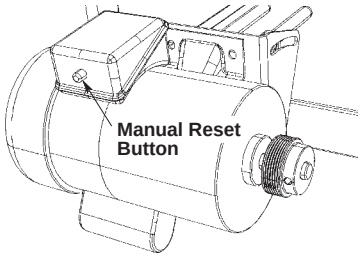
Your saw is equipped with a manual-reset thermal-overload protector designed to open the power line circuit when the motor temperature exceeds a safe level, when motor is overloaded or when a low voltage condition exists.

WARNING: To reduce the risk of thrown objects or blade contact from unexpected starting. If the protector stops the saw motor, immediately turn the saw switch "OFF", remove the key and allow motor time to cool.

1. After cooling to a safe operating temperature, the overload protector can be reset by pushing the red button on the junction box of the motor. If the red button will not click into place immediately, the motor is still too hot and must be allowed to cool for a while longer.
   The time required for the motor to cool may be equal to the length of time the saw was used before the thermal overload protector opened. **NOTE:** An audible click will indicate the protector is reset, push hard to hear the click.
2. As soon as the red button is reset, the saw may be started and operated normally.
3. Frequent "blowing" of fuses or tripping of circuit breakers may result if:

a. Motor is overloaded - Overloading can occur if you feed too rapidly or if saw is misaligned.

b. Motor circuit is fused differently from recommendations - Always follow instructions for the proper fuse/ breaker. Do not use a fuse/breaker of greater capacity without consulting a qualified electrician.



c. Low voltage - Although the motor is designed for operation on the voltage and frequency specified on motor nameplate, normal loads will be handled safely on voltage not more than 10% above or below the nameplate voltage. Heavy loads, however, require that voltage at motor terminals equals the voltage specified on nameplate.

4. Most motor troubles may be traced to loose or incorrect connections, overloading, reduced input voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor fails to perform satisfactorily. Check wire sizes and length with the Wire Size Chart below.

Wire Sizes

NOTE: Make sure the proper extension cord is used and is in good condition.

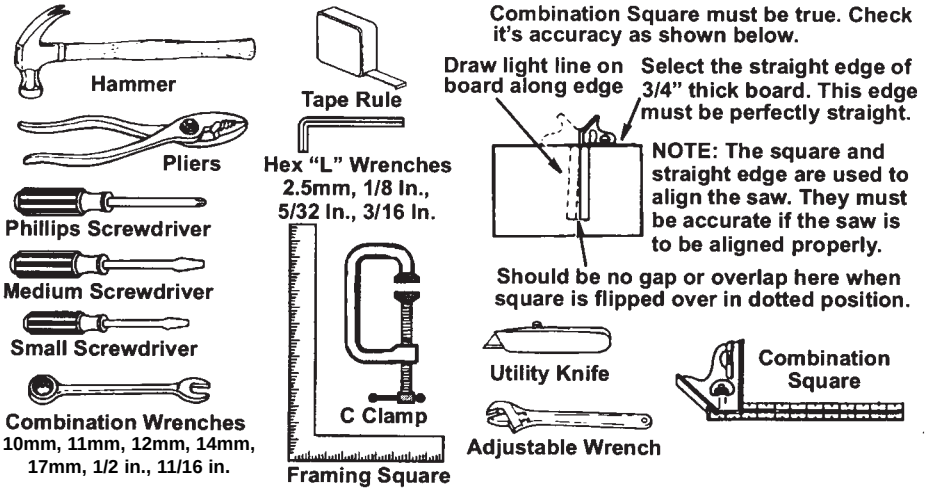
The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table shown to determine the minimum wire size (A.W.G.) extension cord.

Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-prong receptacles which accept the tool's plug.

Extension Cord Length	Gauge (A.W.G.)	
	110-120V	220-240V
0-25 Ft.	14	16
26-50 Ft.	12	14

Unpacking and Checking Contents

Tools Needed


Hammer
Pliers
Phillips Screwdriver
Medium Screwdriver
Small Screwdriver
Combination Wrenches
10mm, 11mm, 12mm, 14mm, 17mm, 1/2 in., 11/16 in.
Tape Rule
Hex "L" Wrenches
2.5mm, 1/8 In., 5/32 In., 3/16 In.
C Clamp
Framing Square
Combination Square must be true. Check it's accuracy as shown below.
Draw light line on board along edge
Select the straight edge of 3/4" thick board. This edge must be perfectly straight.
NOTE: The square and straight edge are used to align the saw. They must be accurate if the saw is to be aligned properly.
Should be no gap or overlap here when square is flipped over in dotted position.
Utility Knife
Adjustable Wrench
Combination Square

Unpacking

The TS3650 comes with two cartons labeld 1 of 2 and 2 of 2. Make sure you have both cartons before beginning assembly.

1. Separate saw and all parts from packing materials and check each one with the illustration and the "List of Loose Parts" to make certain all items are accounted for, before discarding any packing material. Call 1-866-539-1710 or E-mail us at info@ridgidwoodworking.com if any parts are damaged or missing.

WARNING: If any parts are missing, do not attempt to assemble the table saw, plug in the power cord or turn the switch on until the missing parts are obtained and are installed correctly.

2. Remove the protective oil that is applied to the table top and edges of the table and table extensions. Use any ordinary household type grease and spot remover.

WARNING: To reduce the risk of fire or health hazard, never use gasoline, naphtha, or similar highly volatile solvents.

3. Apply coat of paste wax to the table and table extensions.

WARNING: The saw is heavy. To reduce the risk of back injury, get help to lift the saw. Hold the saw close to your body. Bend your knees so you can lift with your legs, not your back.

NOTE: Before beginning assembly:

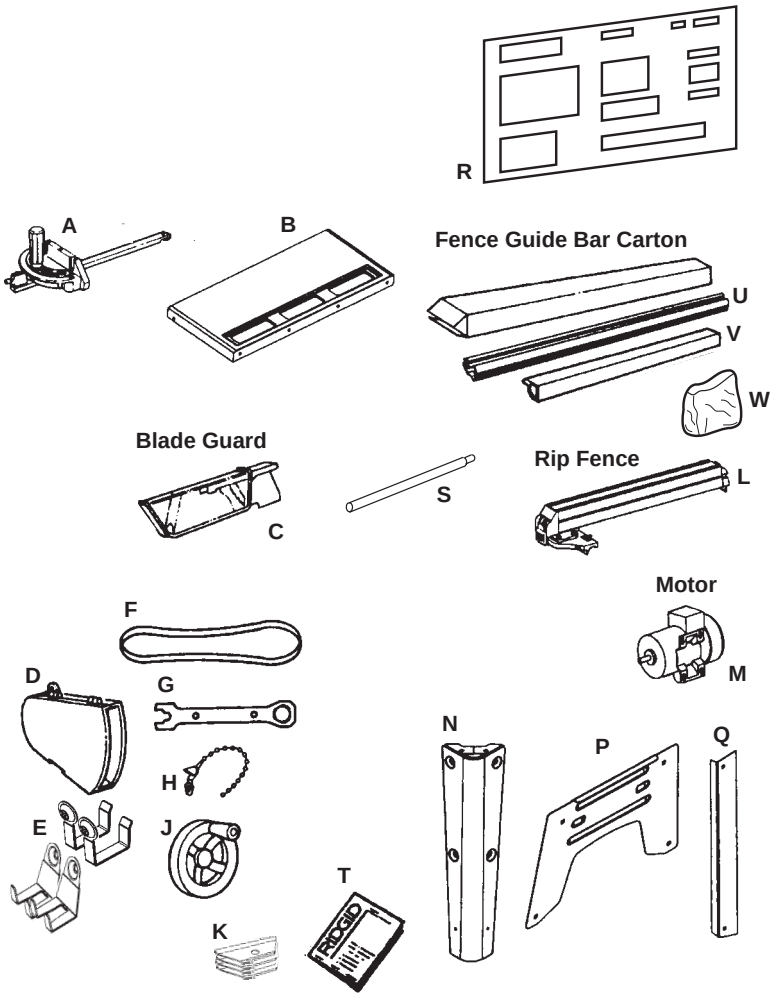
- Check that all parts are included. If you are missing any part, do not assemble the saw.
- Sometimes small parts can get lost in packaging material. Do not throw away any packaging until saw is put together. Check packaging for missing parts before contacting RIDGID.
- A complete parts list (Repair Parts) is at the end of the manual. Use this list to identify the part number of the missing part.

WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understand the safety and operating instructions.

Unpacking and Checking Contents (continued)

List of Loose Parts

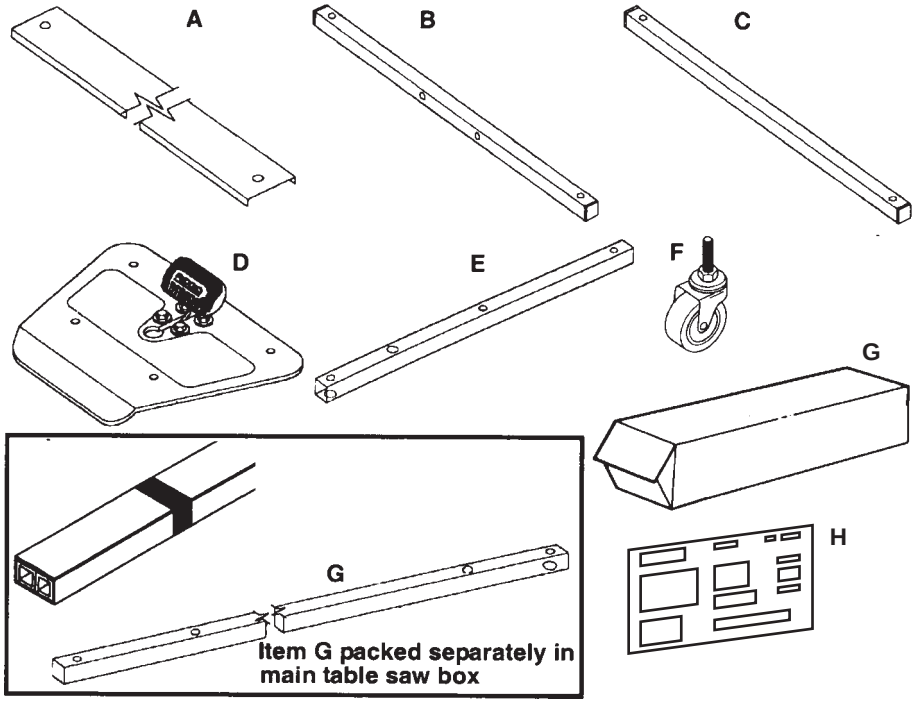
Item	Part Name	Qty.
A	Miter Gauge	1
B	Table Extension	2
C	Blade Guard	1
D	Belt Guard	1
E	Storage Hook Bag	1
F	Drive Belt	1
G	Blade Wrench	2
H	Wire Tie	3
J	Handwheel	2
K	Foot Stiffener	4
L	Rip Fence	1
M	Motor/Switch Assembly	1
N	Leg	4
P	Leg Brace	2
Q	Side Stringer	2
R	Blister Pack - Hardware	1
S	Rod Support	1
T	Operators Manuals	
Fence Guide Bar Carton Containing:		
U	Front Fence Guide Bar	1
V	Rear Fence Guide Bar	1
W	Bag Loose Parts	1



Herc-U-Lift™ Caster Carton

Item	Description	Qty.	Item	Description	Qty.
A	Channel Rear	1	E	Tube Front 13-7/8" Long	2
B	Tube U-Bolt 19-5/8" Long	1	F	Caster Swivel 3"	4
C	Tube Support 17-1/4" Long	1	G	Tube Rear 27" Long	2
D	Plate Assembly	1	H	Blister Pack - Hardware	1

Loose Parts



Assembly

Installing Bevel Handwheel

1. Locate the following hardware:

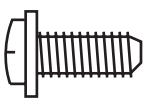
   1 Pan Head Screw with Lockwasher, 1/4-20 x 5/8" long

   1 Lockwashers, 1/4 External Type

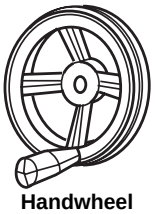
   From among the loose parts, find the following:

   2 Handwheels

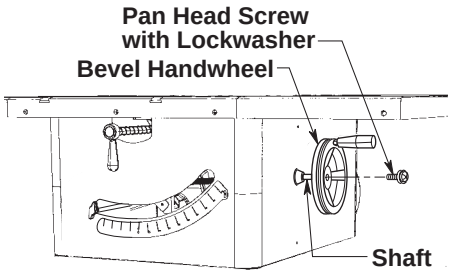
2. Line up flat spots on shaft and hand-wheel, push handwheel onto shaft. Install screw and lockwasher to lock handwheel on shaft. Repeat for the other handwheel.



1/4-20 x 5/8 Pan Head Screw with Lockwasher



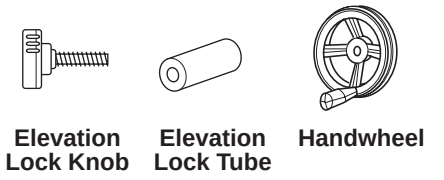
Handwheel

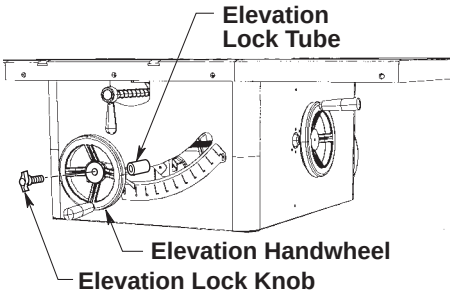


Assembly (continued)

Installing Elevation Handwheel

1. Locate the following hardware:
   - 1 Handwheel
   - 1 Elevation Lock Knob
   - 1 Elevation Lock Tube
2. Slide elevation lock tube onto elevation shaft.
3. Line up flat spots on shaft and handwheel, push handwheel onto shaft.
4. Screw elevation lock knob onto shaft. Do not tighten at this time.

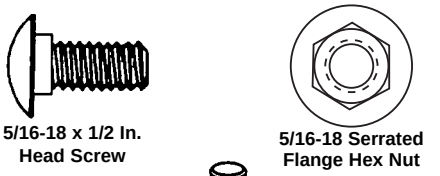


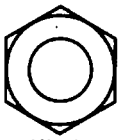


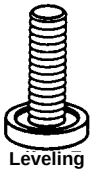
Assembling Leg Stand

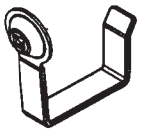
1. Locate the leg stand.

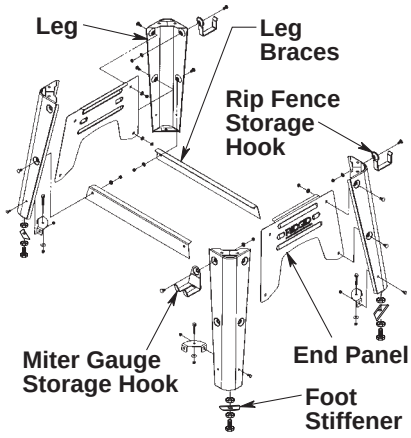
   Remove all parts from packing material.
2. Locate the following hardware:
   - 23 Truss Head Screws, 5/16-18 x 5/8" long
   - 23 Serrated Flange Hex Nuts, 5/16-18
   - 4 Leveling Feet
   - 8 3/8-16 Hex Nut
3. Locate the following:
   - 4 Legs
   - 2 End Panels
   - 2 Leg Braces
   - 1 Miter Gauge Storage Hook
   - 2 Rip Fence Storage Hooks
   - 4 Foot Stiffeners









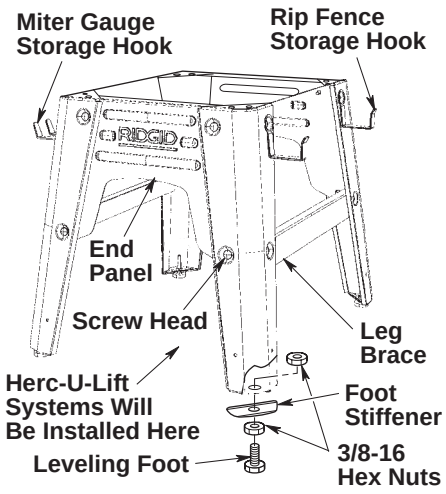


4. Assemble the legs as shown.

   Insert the screws through the holes in the legs, then through the holes in the end panels. Attach miter gauge and rip fence storage hooks as shown.

   Legs must be assembled on top of panels.
5. Screw on the serrated flange hex nuts hand tight.
6. Insert the screws through the holes in the legs, then through the holes in the leg braces.
7. Screw on the serrated flange hex nuts but do not tighten until completely assembled.
8. Install leveling feet through holes in foot stiffeners and bottom of legs as shown. Adjust feet all the way up to bottom of leg.
9. Once you have completed the entire assembly process, move saw to desired location and adjust the four leveling feet to support the tool as follows:

a. With 9/16" wrench loosen bottom nut.
b. Back off top nut by hand.
c. Raise or lower foot by adjusting bottom nut using 9/16" wrench.
d. Snug top nut against inside of leg by hand.
e. Tighten all four bottom nuts using 9/16" wrench.



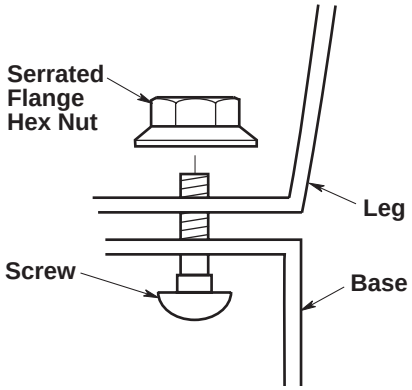
Assembly (continued)

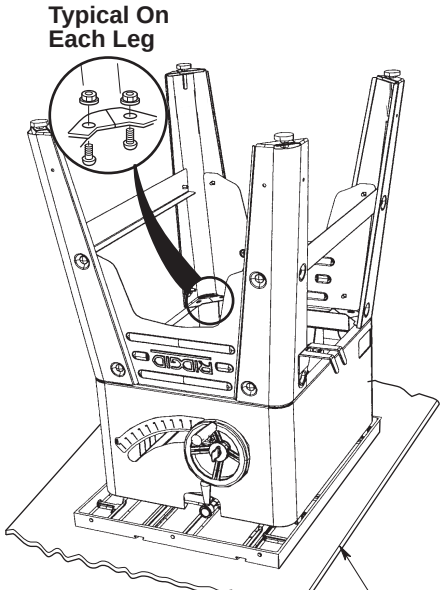
Mounting Your Saw

1. Place the saw upside down onto a smooth piece of cardboard or heavy paper, on the floor, so the saw is resting on the table top.

WARNING: The saw is heavy. To reduce the risk of back injury, get help to lift the saw. Hold the saw close to your body. Bend your knees so you can lift with your legs, not your back.

2. Place legs on saw so that holes in saw base and leg set line up and trim label is facing front.
3. Install screws and serrated flange hex nuts as shown.
4. Tighten all leg assembly and mounting hardware at this time.

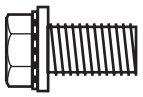




Assembling Table Extensions

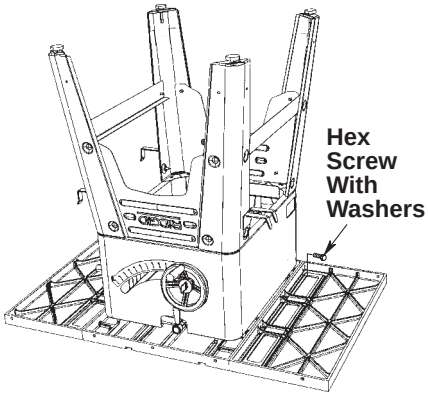
1. From the blister pack locate the following hardware: (Quantity indicated is for two extensions)
   8 Hex Head Screws, 5/16-18 x 3/4" Long with washers

NOTE: Assemble with saw upside down.



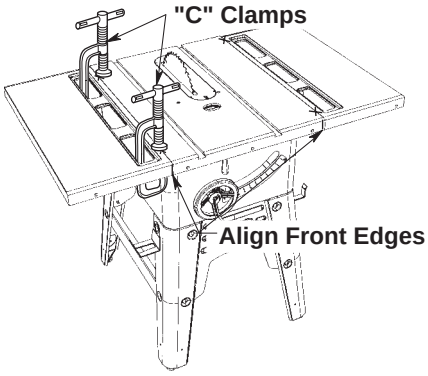
5/16-18 x 3/4 In. Hex Head Screw With Washers

WARNING: Stock table extensions must be installed. They help support the fence guide bars. An unsupported guide bar can twist. Twisted guide bars can misalign fence. A misaligned fence can cause binding or kickback. You could be hit or cut.



2. Insert four (4) 5/16-18 x 3/4 in. long screws with washers through the holes in each extension and screw into the table. Do not tighten.
3. Repeat step 2 to install the other extension.
4. Stand saw upright on legs. Roll saw over onto front then up onto feet.

WARNING: The saw is heavy. To reduce the risk of back injury, get help to lift the saw. Hold the saw close to your body. Bend your knees so you can lift with your legs, not your back.



5. Line up the front edge of extension with the front edge of the table. At the spots marked “X” in the drawing, tighten a “C” Clamp over the edge of table and extension. Use a combination square to check the alignment of the front and top edges nearest the “X”’s. Tighten the two corner nuts only with a 1/2" wrench.

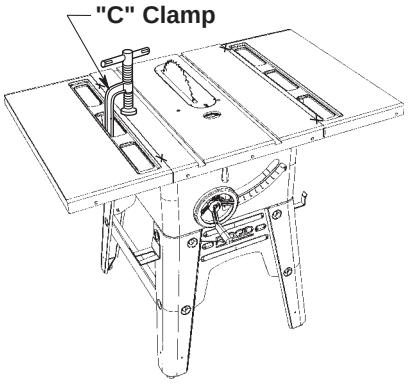
NOTE: This assembly may also be done without the use of a “C” Clamp.

Assembly (continued)

WARNING: Table extensions must be installed. Front edge of table and extensions must be lined up. An uneven front edge can twist the fence guide bar. Twisted guide bars can misalign fence. A misaligned fence can cause binding or kickback. You could be hit or cut.

6. Tighten a “C” clamp over the edge of table and extension at the center until the extension is even with the table surface as shown. Tighten the two center nuts with a 1/2" wrench.

7. Repeat steps 5 and 6 to align the other extension.

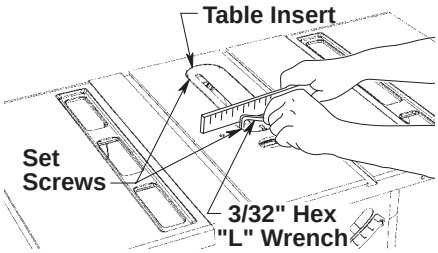


Checking Table Insert

WARNING: To reduce the risk of injury from accidental start, make sure switch is “OFF” and plug is not connected to power source outlet.

1. Insert should be flush with table top. Check as shown. Loosen flat head screw that holds insert and adjust the four set screws as necessary. Tighten flat head screw. Do not tighten screw to the point where it bends the insert.

CAUTION: Insert must be even with the table surface. Inserts too high or low can let the workpiece “snag” or catch on uneven edges. Workpiece could twist and kickback.



2. To remove insert.

a. Make sure saw is off and unplugged.

b. Loosen flat head screw.

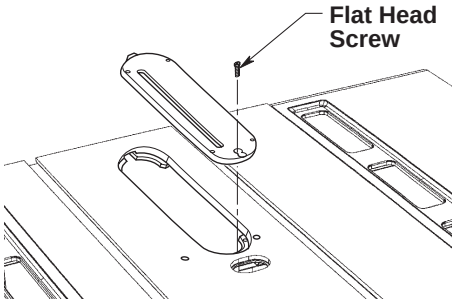
c. Lift insert from front end, and pull toward front of saw.

d. To replace insert.

e. Make sure saw is off and unplugged.

f. Place insert into insert opening in table and push toward rear of saw to engage spring clip and until keyslot in insert will drop over flat head screw. Tighten screw.

g. Do not tighten screw to the point where it bends the insert.



Checking Heeling Adjustment or Parallelism of Sawblade to Miter Gauge Groove

While cutting, the material must move in a straight line parallel to the sawblade. Therefore, both the miter gauge groove and the rip fence must be parallel to the sawblade.

WARNING: The blade must be parallel to the miter gauge groove. Misaligned blades could bind on workpiece. Workpiece could suddenly kickback. You could be cut or hit.

If the sawblade is not parallel to the miter gauge groove, the blade will bind at one end of the cut. This is known as “Heeling”.

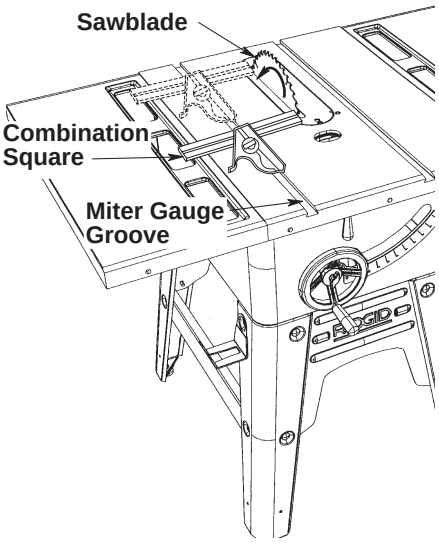
WARNING: To reduce the risk of injury from accidental start, make sure switch is “OFF” and plug is not connected to power source outlet.

To check for parallelism:

1. Raise blade to approximately 3" depth of cut.
2. Mark an “X” on one tooth.
3. Place the head of a combination square in the left miter gauge groove. Rotate the blade so that the tooth marked with an “X” is at the front and adjust the blade of the square so that it just touches the tip of the marked tooth. Lock the square at this setting.

NOTE: Hold the head of the combination square firmly against the edge of the miter gauge groove during all measurements.

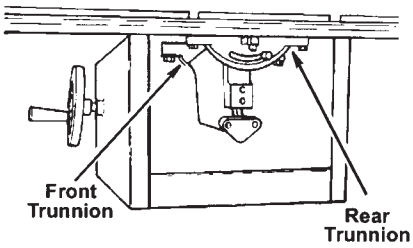
4. Move the square to the rear of the blade. Rotate the blade so the marked tooth is at the rear and see if the marked tooth again touches the blade of the square.
5. If the marked tooth touches the square at the front and at the rear of the sawblade, the blade is parallel to miter gauge slot. The parallelism is correct. Proceed to the “Checking Blade Tilt, or Squareness of Blade to Table”.
6. If square does not touch the marked tooth at the rear and front equally (gap is greater that 0.015 inch–thickness of 4 pages from Owners Manual) or tooth interferes with square, the mechanism underneath must be adjusted to make the blade parallel to the miter gauge groove.

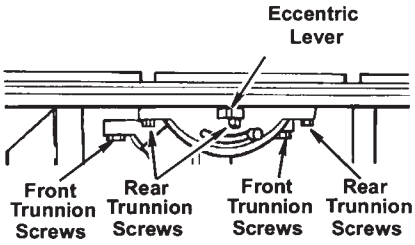


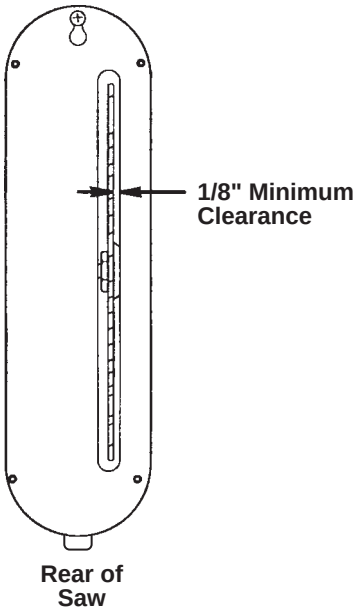
Assembly (continued)

7. Tighten the tilt lock handle located at the front of the saw.
8. Loosen the three mounting screws that hold the front trunnion and the three mounting screws that hold the rear trunnion using a 9/16" wrench. The front center trunnion bolt can be accessed through the slot for the tilt lock handle in the front of the saw.
9. Check position of the sawblade in the table insert slot. There should be a minimum of 1/8" between the right edge of the slot and the blade (viewed from rear of saw). Adjust by moving the front trunion. Secure by lightly tightening the front trunion center bolt.
10. Standing at the rear of the saw, determine which direction the rear of the sawblade must move to make it parallel to the miter slot. To move the rear of the blade to the right - turn the micro adjust lever to the left. To move the rear of the blade to the left - turn the micro adjust lever to the right.
11. Using the micro adjust lever move the rear of the blade in the desired direction. Repeat steps 3 and 4 until blade is parallel to miter gauge slot.
12. Securely tighten all six screws on the rear and front trunnion using a 9/16" wrench.
13. Recheck the marked blade tooth at the front and rear position to insure that the adjustment has not moved.
14. If the adjustment moved, loosen the five bolts (all except front center) and repeat steps 11-12.
15. When the adjustment is correct securely tighten all six bolts on the front and rear trunnion.

NOTE: Maintain a minimum 1/8 inch clearance between the right side of the blade and the table insert (viewed from rear of saw). This insures clearance when the blade is beveled.







To Move Blade	Move Lever
←	→
→	←

Checking Blade Tilt, or Squareness of Blade to Table

When the bevel pointer is pointing directly to the “0” mark on the bevel scale, the sawblade should make a square cut 90° to the table.

WARNING: For your own safety, turn switch “OFF” and remove plug from power source outlet.

To check for squareness, 90° position:

1. Raise blade to 3" depth of cut.
2. Operate the tilt lock handle (counter-clockwise) to loosen the tilt clamp screw.

NOTE: Handle is spring loaded for engagement with screw head - must be pushed inward for disengagement whenever necessary to obtain a new grip on screw head. Always position handle in downward position to prevent binding when tilting the blade.

3. Rotate tilt handwheel clockwise a few turns to tilt blade. Now, rotate handwheel counterclockwise until it stops. Blade should now be square with table and pointer should point to “0”.
4. Place the square against blade. Make sure square is not touching the tip of one of the saw teeth.

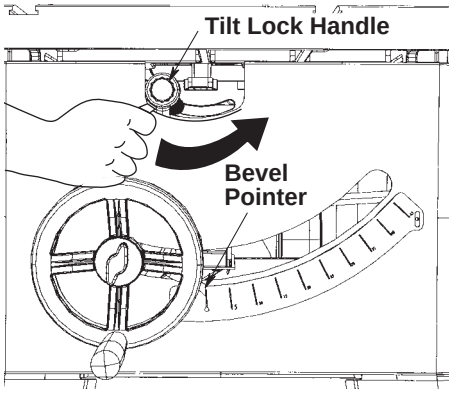
A. If blade is square to table

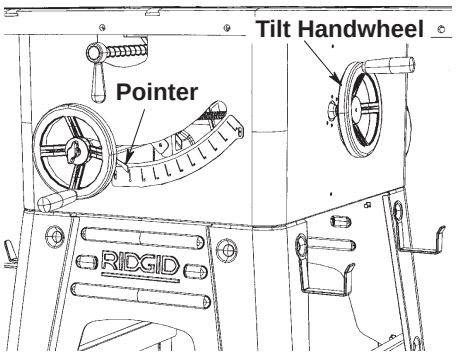
1. Check pointer. If pointer does not point to the “0” mark on the bevel scale.

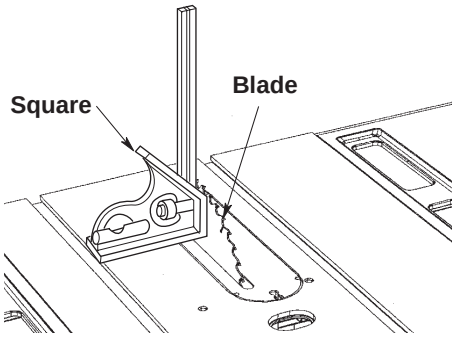
a. Remove elevation handwheel assembly.

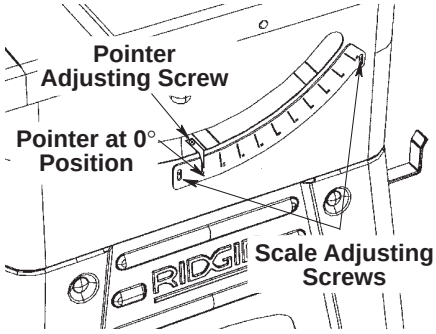
b. To adjust loosen the screw and position the pointer using a medium screwdriver.

c. Install elevation handwheel assembly.









Assembly (continued)

B. If blade is not square to table...the 90° stop screw must be adjusted.

1. Use a 3/16" hex "L" wrench to unscrew the 90° stop screw until it is flush with the top of the table.
2. Turn bevel handwheel clockwise one turn, then turn handwheel counter-clockwise until blade is square with table.
3. Screw 90° stop screw in until the sawblade starts to move. Check once again for squareness and readjust screw, if necessary.
4. Check pointer as described in step A.

To check for alignment, 45° Position

1. Tilt blade to left as far as it will go.
2. Place an accurate square against blade. Make sure square is not touching the tip of one of the saw teeth.

A. If blade is 45° to table;

1. Check pointer. If pointer does not point to the 45° mark on the scale, the scale must be adjusted.

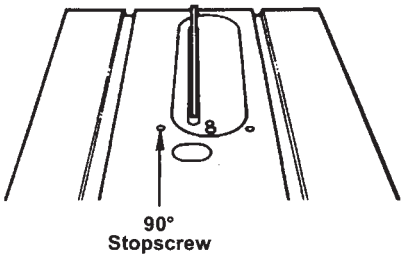
a. Remove elevation handwheel assembly.

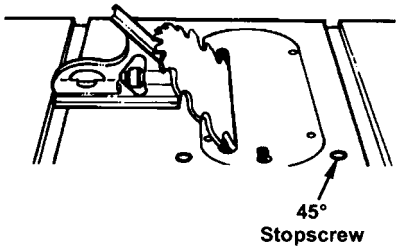
b. Loosen two screws on scale and adjust scale up or down until pointer points to 45° mark.

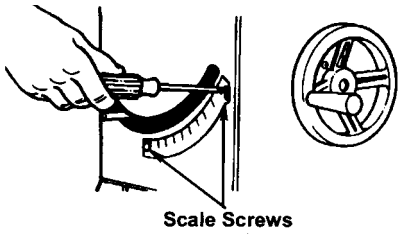
c. Install elevation handwheel assembly.

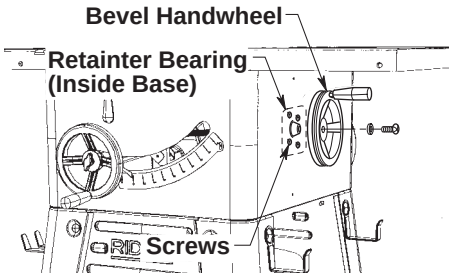
B. If blade is not 45° to table, stop screw and scale must be adjusted.

1. Use a 3/16" hex "L" wrench to unscrew the 45° stop screw until it is flush with the top of the table.
2. Turn bevel handwheel until blade is 45° to the table.
3. Screw 45° stop screw in until the sawblade starts to move. Check once again and readjust screw, if necessary.
4. Check pointer as described in step A above.









Checking Tilt Mechanism

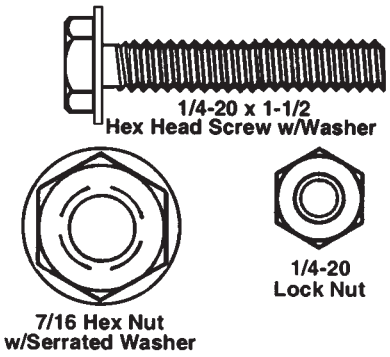
With bevel lock handle loosened, the hand-wheel should turn freely without binding. The turning friction can be adjusted by tightening or loosening the screws in the bearing retainer.

NOTE: Bevel handwheel must be removed to adjust. When adjusting the screws in the bearing retainer, hold the nut inside using a 3/8 inch wrench.

Assembling Herc-U-Lift™ Caster System

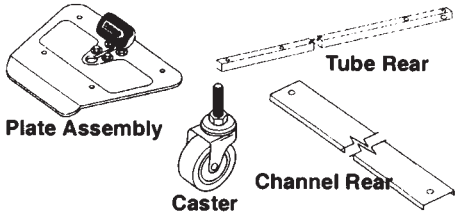
Assembly Tips

1. The caster set consists of an upper and lower assembly.
2. First put the upper and lower assembly together following instructions below.
3. Loosely assemble all nut and screw connections. After mounting the assemblies on the table saw, adjust frames on center, and then securely tighten all fasteners.
4. When assembling the frames, Tube Rear (27" long) and Tube Front (13-7/8" long) must be assembled so the large hole faces down towards the floor. See the illustration before assembling.



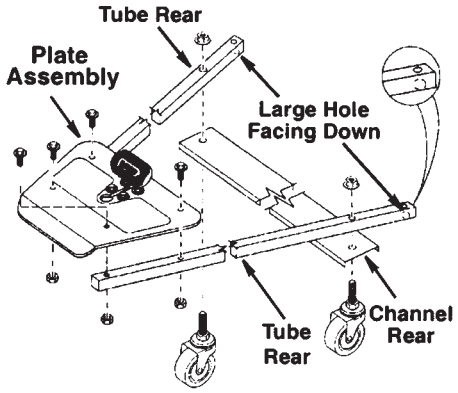
Upper Assembly

1. Locate the following hardware:
   - 4 Hex Head Screw w/Washer, 1/4-20 x 1-1/2
   - 2 Hex Nuts w/Serrated Flange 7/16
   - 4 Lock Nuts 1/4-20
2. From the loose parts find the following:
   - 1 Plate Assembly
   - 2 Tube Rear (27" Length)
   - 1 Channel Rear
   - 2 Casters
3. Assemble Tube Rear (27 inch length) to each side of the Plate Assembly as shown using four each 1/4-20 x 1-1/2 hex head screw and lock nut. Loosely assemble at this time.



NOTE: The larger hole at the end of the tube, opposite the plate assembly, must face down.

4. Align rear channel with holes in the rear tubes as shown. Assemble caster through channel and tube as shown. Fasten with 7/16 nut as shown. Loosely assemble at this time.



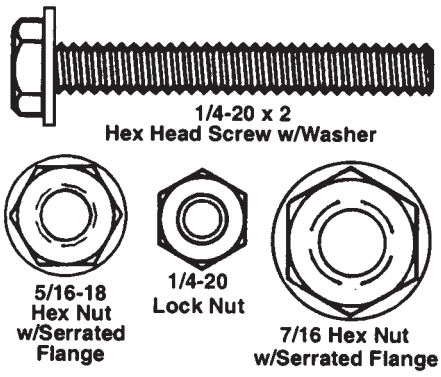
Assembly (continued)

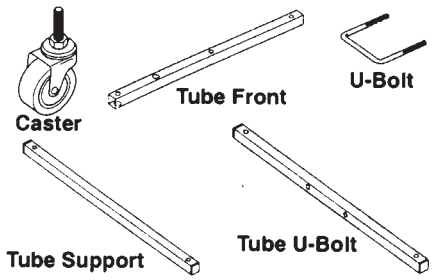
Lower Assembly

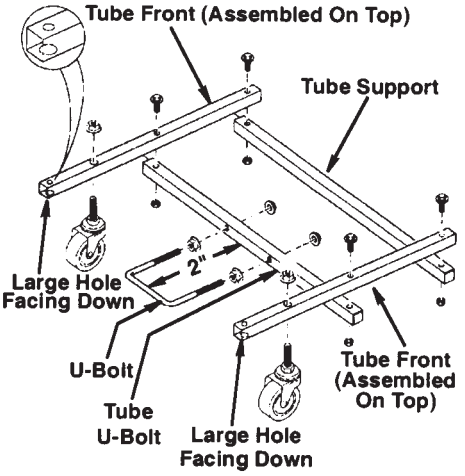
1. Locate the following hardware.
   - 4 Hex Head Screw w/Washer 1/4-20 x 2
   - 4 Lock Nut 1/4-20
   - 4 Hex Nut w/Serrated Flange 5/16-18
   - 2 Hex Nut w/Serrated Flange 7/16
   - 1 U-Bolt
2. From the loose parts find the following:
   - 2 Caster
   - 2 Tube Front (13-7/8" Long)
   - 1 Tube Support (17-1/4" Long)
   - 1 Tube U-Bolt (19-5/8" Long)
3. Assemble support tube (17-3/4 inch length) to both front tubes (13-7/8 inch length) using two each 1/4-20 x 2 hex head screw, and lock nut as shown. Loosely assemble at this time.

NOTE: The larger hole at the end of the front tube must face down as shown.

4. Align and assemble U-bolt tube (19-5/8 inch length) with holes in the front tube using two each 1/4-20 x 2 hex head screw, and lock nut as shown. Loosely assemble at this time.
5. Assemble 5/16 nut on each side of U-bolt as shown with serration facing tubing.
6. Place U-bolt through holes in U-bolt tube. Assemble 5/16 nuts on each side of U-bolt as shown with serration facing tube.
7. Adjust U-bolt about two inches from tube.
8. Assemble caster through tube. Fasten with 7/16 nut as shown. Tighten nuts securely. Use adjustable wrench on caster stem hex to keep stem from turning while tightening nut.







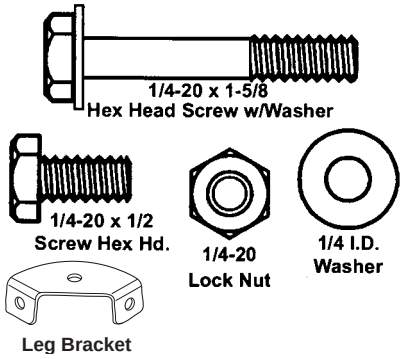
Assemble each tube exactly as shown. Note both front tubes are placed on top of the tube U-bolt and tube support as shown.

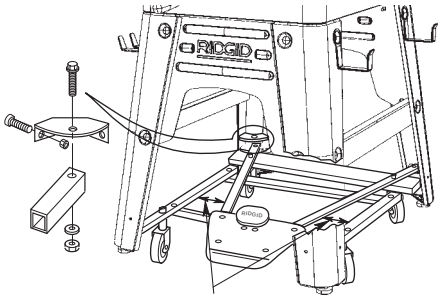
Assembling Herc-U-Lift™ Caster System to Saw

Installation Instructions

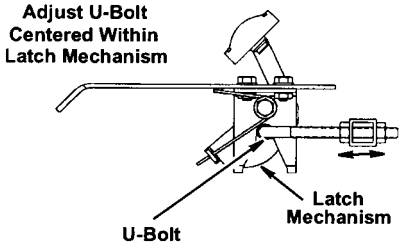
WARNING: To reduce the risk of injury from unexpected starting, unplug the tool before attaching caster set.

1. Locate the following hardware:
   - 4 Hex Head Screw w/Washer 1/4-20 x 1-5/8
   - 4 Washer 1/4 I.D.
   - 12 Lock Nut 1/4-20
   - 8 Hex Head Screw 1/4-20 x 1/2
2. Locate the following:
   - 4 Bracket
3. Install the four leg brackets on the inside of each leg using 1/4-20 x 1/2" hex head screws and lock nuts. Tighten screws securely.
4. Place the Lower Assembly under the saw with the front ends of the tube under the front leg brackets. Install the hex head screw (1/4-20 x 1-5/8) through the front leg bracket and tube as shown. **Install the washer and lock nut until lock nut is flush with end of screw.** The screw should freely pivot side to side.
5. Place the upper assembly under the saw (see illustration) with the rear ends of the tube under the leg brackets and install the hex head screw (1/4-20 x 1-5/8), washer and nut in the same manner as step 4. Center the upper tubes between the lower tubes and tighten all hardware at this time beginning with the four (4) screws attaching the plate assembly to the tubes.





Center Frames Equal Distance on Each Side Tighten All Nuts

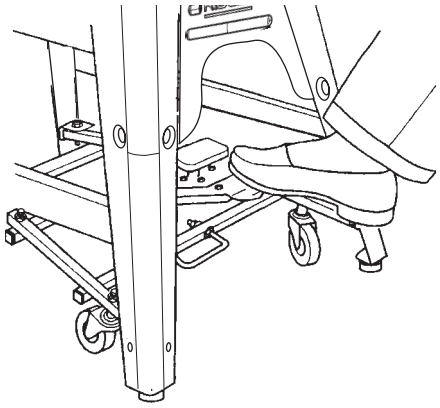


6. Insure the upper tubes remain centered between the lower tubes and tighten the hardware on the lower assembly.
7. Press down on the plate assembly and check alignment of the U-bolt. The U-bolt should be centered within the latch mechanism as shown. Release pedal and adjust the U-bolt as necessary, then tighten the nuts holding the U-bolt to the tube.

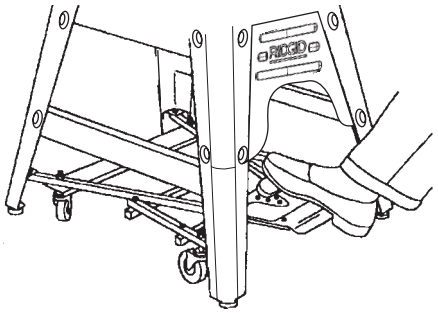
Assembly (continued)

Operation of Herc-U-Lift™ Caster System

The caster set is activated by pressing down on the metal platform. This will raise the table saw and allow the saw to be moved to desired location.



To lower the table saw, press down on the foot pedal. Make sure the saw firmly rests on the floor. Adjust the rubber leveling feet if necessary.



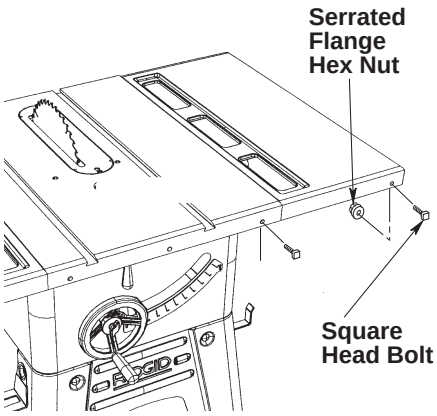
Installing Front Rip Fence Guide Bar

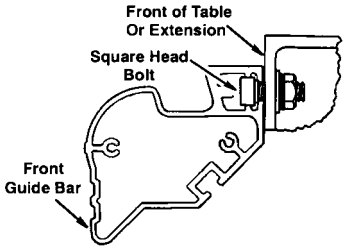
1. Locate the following hardware:
   - 4 Square Head Bolts, 5/16-18 x 1" Long
   - 4 Serrated Flange Hex Nuts, 5/16-18
2. From the fence guide bar carton find the following:
   - 1 Front Guide Bar (Long)
3. Insert four 5/16-18 x 1” long square head bolts into the holes as shown.
4. Attach serrated flange hex nut loosely, as shown, so the bolt head protrudes through the front edge of the table and extension.
5. Slide the front guide bar slot over each of the square head bolts as shown and finger tighten the four nuts.
6. The front guide bar must be aligned left to right at this time. Align the 7-1/8 inch mark on the right rip scale with the right edge of the cast iron table top.
7. Push front guide bar against the saw table and extensions. Finger tighten each nut on the table and extensions. The guide bars will be aligned and the nuts tightened at a later time.

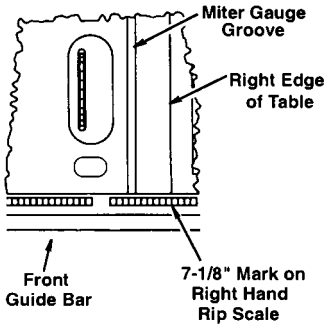
WARNING: Front and rear guide bars must be aligned with blade. Misaligned guide bars could twist. Twisted guide bars could misalign fence. A misaligned fence could cause binding or kickback. You could be hit or cut.

5/16-18 x 1 In. Square Head Bolt

5/16-18 Serrated Flange Hex Nut







Assembly (continued)

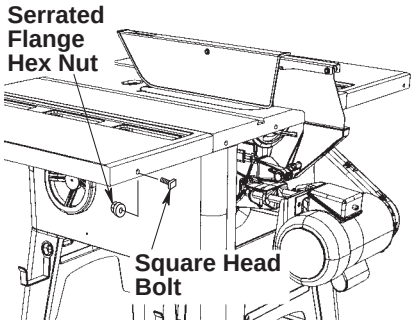
Installing Rear Fence Guide Bar

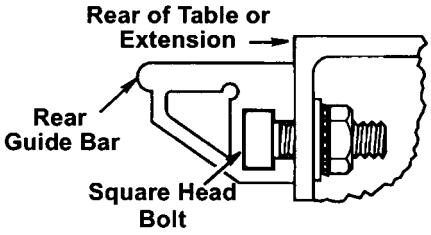
1. Locate the following hardware:
   - 4 Square Head Bolts, 5/16-18 x 1" Long
   - 4 Serrated Flange Hex Nuts, 5/16-18
2. From the fence guide bar carton find the following:
   - 1 Rear Guide Bar (Short)
3. Insert four 5/16-18 x 1” long square head bolts into the holes as shown.
4. Attach serrated flange hex nut loosely, as shown, so the bolt head protrudes through the rear edge of the table and extensions.
5. Slide the rear guide bar slot over each of the square head bolts, similar to the front guide bar assembly.
6. Position a framing square or straight-edge against either side of the blade. Move the rear guide bar right or left until the indicator mark is aligned with the straightedge.
7. Push rear guide bar against the saw table and extensions. Finger tighten each nut on the table and extensions. The guide bars will be aligned and the nuts tightened at a later time.
8. Shims may be required between the rear guide bar and saw table or extension. See instructions for adjusting rip fence guide bars.

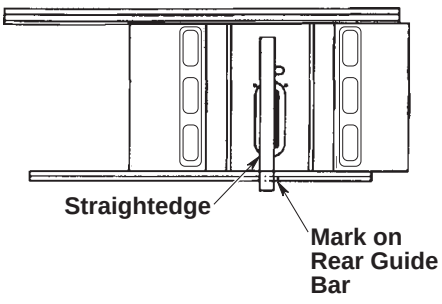
WARNING: Front and rear guide bars must be aligned with blade. Misaligned guide bars could twist. Twisted guide bars could misalign fence. A misaligned fence could cause binding or kickback. You could be hit or cut.

5/16-18 x 1 In. Square Head Bolt

5/16-18 Serrated Flange Hex Nut







Adjusting Rip Fence Guide Bars

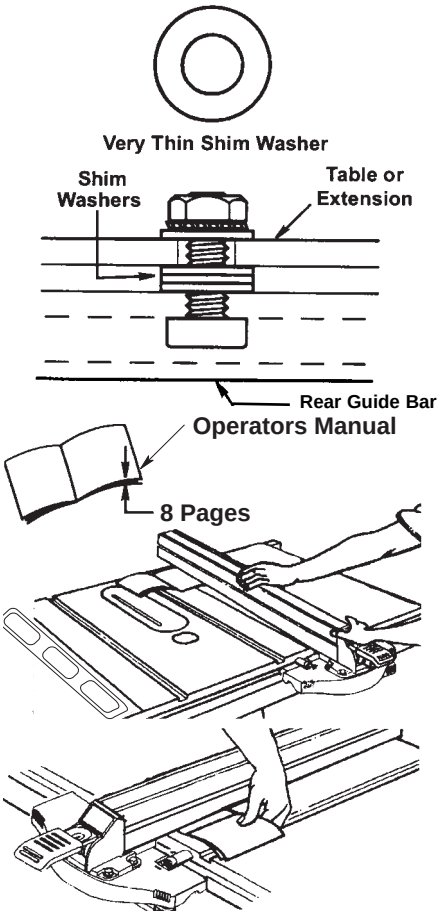
WARNING: Front and rear guide bars must be aligned with blade. Misaligned guide bars could twist. Twisted guide bars could misalign fence. A misaligned fence could cause binding or kickback. You could be hit or cut.

Installing Shims

1. Locate the following hardware:
   10 Very thin shim washers.
2. Loosen the 4 nuts holding the rear guide bar in place.
3. Holding the guide bar against the rear of saw table and extensions, note if there is any gap between the table or extension and the inside face of the rear guide bar. If no gap exists, finger tighten nuts. If gap appears, slip shim washers into gap until space is full.
4. Stack shim washers on table or extension nearest to bolt that is affected.
5. When all four bolt locations have been checked, slide guide bar off of bolts and install stacks of shim washers under head of appropriate bolt(s).
6. Reinstall rear guide bar and realign the “mark” on rear guide bar as described earlier. Finger tighten nuts.

Aligning Rip Fence Guide Bars

1. Position rip fence over right miter gauge groove. While holding up rear of rip fence engage front end of rip fence onto the front guide bar. Now lower rip fence down onto table.
2. Open operators manual so that 8 pages are separated from the rest of the book. Use these pages like a feeler gage to set the spacing between the bottom of the fence and the table top.



3. Rip fence should clear saw table/ extension surface just enough to allow pages to slide back and forth under rip fence. If rip fence is too high or too low, loosen nuts holding front guide bar and adjust bar up or down. Wrench tighten nuts when proper alignment is achieved.
4. Adjust rear guide bar, as noted above.
5. Slide fence left and right on guide bar to ensure clearance from side to side and from front to back. If necessary readjust rip fence guide bars to get proper clearance. Wrench tighten all nuts holding guide bars in place.

NOTE: During this adjustment, the left/right positioning of the guide bars could be affected. Realignment may be necessary.

Assembly (continued)

Installing Spacer Bar

1. Locate the following hardware:

   2 Set Screws 10-32 x 7/16" long

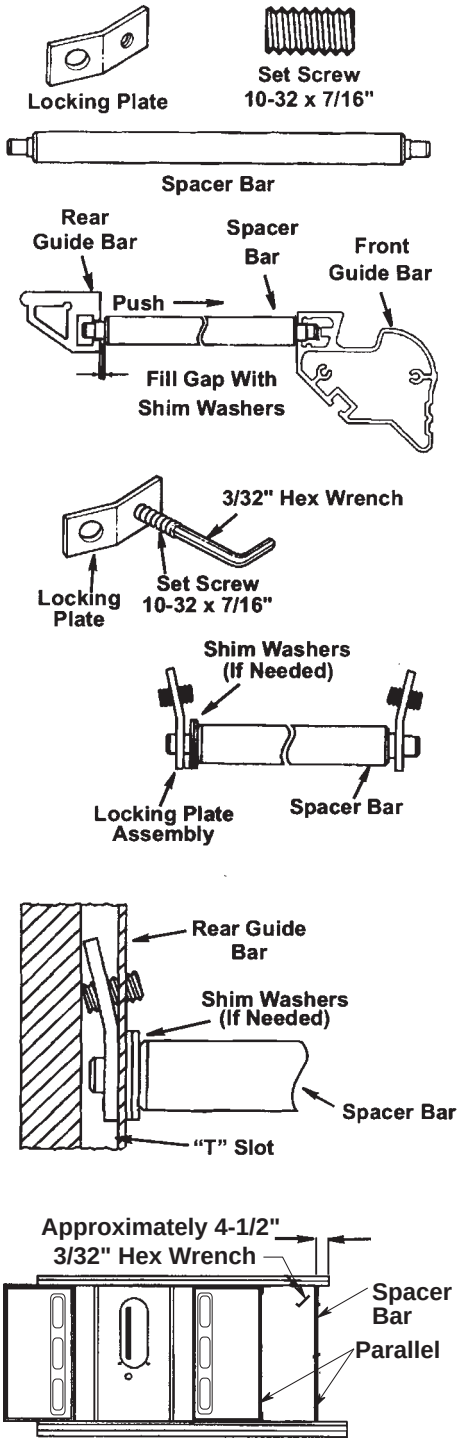
From unlabeled bag assembly remove the following:

   2 Locking Plates

From among the loose parts find the following:

   1 Spacer Bar

2. To determine how many shim washers (shown on previous page) will be needed, slide the reduced ends of the spacer bar into the "T' slots of the front and rear guide bars. Push the spacer bar against the fence brackets and toward the front of saw. If there is a gap between the large diameter of the spacer bar and the inside of the rear guide bar, fill the gap with the appropriate number of shim washers. Remove the spacer bar and place the shim washers over the reduced end of the bar.
3. Thread one of the set screws into each of the locking plates as shown.
4. Place one locking plate assembly over each end of the spacer bar with the bent legs pointing out as shown.
5. Slide the locking plates, set screw end first, into the “T” slots in the front and rear guide bars. Locate the spacer bar approximately 4-1/2" in from the end of the rear guide bar and parallel to the side of the table.
6. Use a 3/32" hex wrench to tighten both set screws while holding the bar in place.



Rip Fence Alignment Adjustment

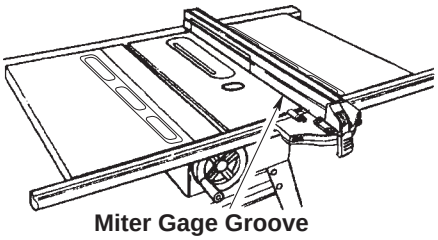
WARNING: A misaligned fence can cause kickbacks and jams. To reduce the risk of injury, follow these instructions until the fence is properly aligned.

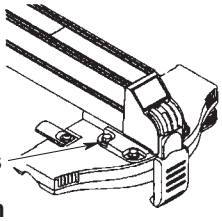
1. **The rip fence must be** PARALLEL with the sawblade and miter gauge grooves. Clean any debris off the fence guide bars. Move fence until it is along side the miter gauge groove and lock it. It should be parallel to groove. If it is not:

a. Unlock fence.

b. Loosen the four hex head screws located to each side of the rip fence handle.

c. Place the blade of the combination square in the right miter gauge groove as shown.





d. Slide the fence against the blade of the combination square .

e. Alternately tighten the hex head screws.

f. Recheck alignment.

g. Repeat steps as needed until rip fence is correctly aligned.

Rip Fence Lock Lever Adjustment

WARNING: Make sure the fence lock works in the center and at each end of the fence guide bar. An improperly adjusted fence could move. Movement could cause binding or kickback. You could be hit or cut.

1. The rip fence lock lever when locked down should hold the rip fence securely. The lever should not be difficult to push down and lock.

   To assure proper fence lock adjustment:

a. Raise lock lever and push fence head toward rear of saw.

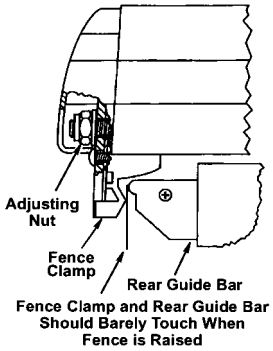
b. Hold fence head down onto front guide bar while lifting rear of fence up and down.

c. Tighten adjusting nut until fence clamp just barely touches rear guide bar.

d. This should provide the best fence adjustment possible without over tightening.

Check fence lock across entire bar length. Recheck fence parallelism with miter slot in locked position and adjust if necessary.

If the fence does not clamp the same across the entire length of the bars, the guide bars may need to be readjusted with shims provided.



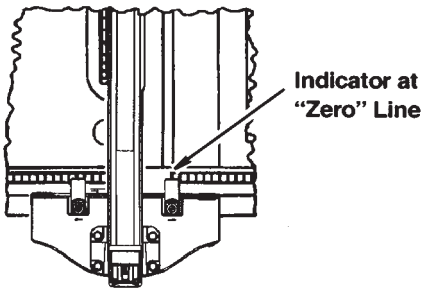
Assembly (continued)

Adjusting Fence Indicator

The rip fence has two indicators. One to use when the fence is on the right side of the blade and one to use when the fence is on the left side of the blade.

1. Place rip fence on saw table so that it lightly touches the right side of the blade and lock it in this position.
2. Loosen pan head screw. Adjust the right indicator so that the red line is located over the “zero” line of the right rip scale and tighten screw.
3. Reposition rip fence on saw table so that it lightly touches the left side of the blade and lock it in place.

NOTE: If blade guard is already installed, it must be temporarily removed to perform this adjustment. Reinstall when adjustment is complete.

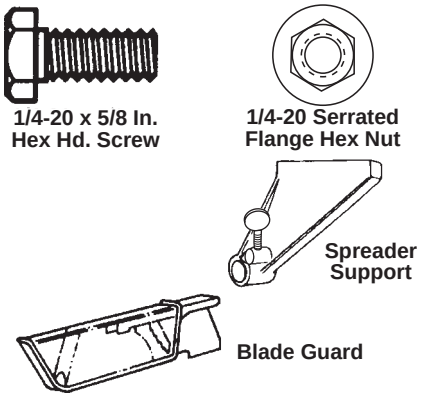


4. Loosen pan head screw. Adjust the left indicator so that the red line is located over the “zero” line of the left rip scale and tighten screw.

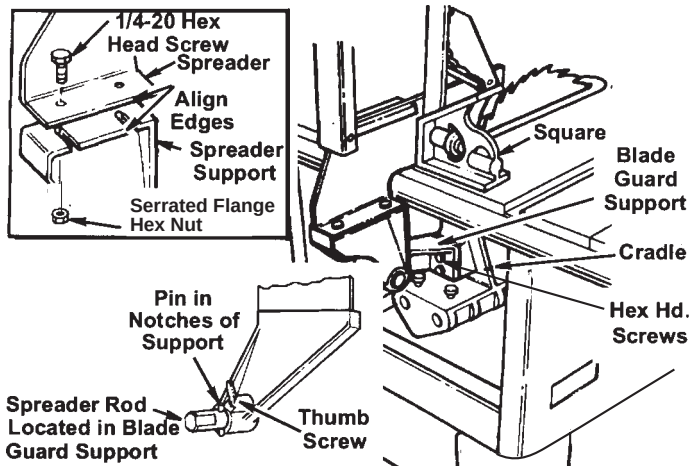
Installing Blade Guard

1. Locate the following parts:
   - 2 Hex Head Screws, 1/4-20 x 5/8" Long
   - 2 Serrated Flange Hex Nuts, 1/4-20
   - 1 Thumb Screw
   - 1 Spreader Support

   Locate the following:
   - 1 Blade Guard
2. Slide spreader support onto spreader rod until notches engage pin. Thread thumbscrew into tapped hole and hand tighten.
3. Attach spreader to spreader support so that the edge of the spreader is even with the edge of the spreader support as shown. Tighten screws with a 7/16 wrench.
4. Raise blade all the way up, make sure it is square with table.
5. Loosen both hex head screws holding blade guard support to cradle.



6. Raise blade guard. Lift up both anti-kickback pawls. Insert a large set screw wrench in the notches of the pawls to hold the pawls out of the way. Align spreader square to table as shown.
7. Tighten both hex head screws.



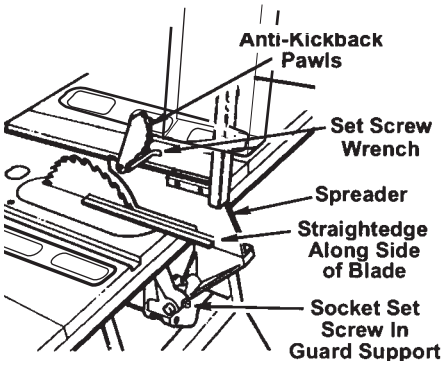
Aligning Blade Guard

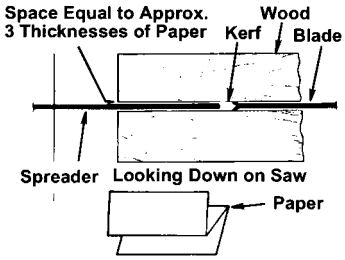
1. Lay blade of square or other straight-edge alongside of blade.
2. Loosen socket set screw in guard support and move spreader left or right so that it touches blade of square. Tighten screw. Socket set screw must tighten against the spreader rod flat.

NOTE: The spreader is now square with the table and approximately in line with the sawblade. The spreader requires further adjustment to align it parallel to the blade and in the middle of the cut (kerf) made by the sawblade.

IMPORTANT: To work properly, the spreader must always be adjusted so the cut workpiece will pass on either side of the spreader without binding or skewing to the side.

NOTE: The spreader is thinner than the width of the cut (kerf) by approximately six thicknesses of paper.



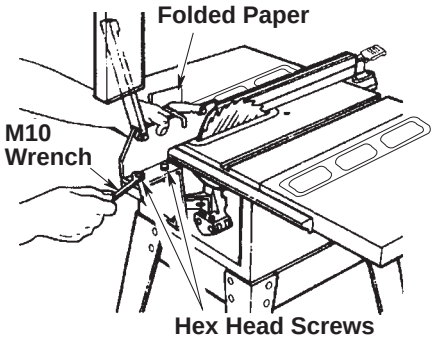


3. Make two folds in a small piece (6 x 6 inch) of ordinary newspaper making three thicknesses.

   The folded paper will be used as “spacing gauge”.

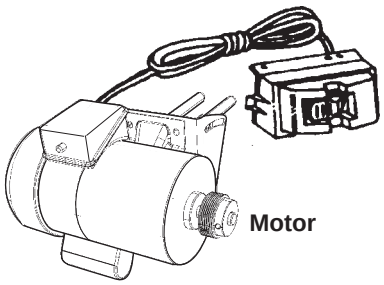
Assembly (continued)

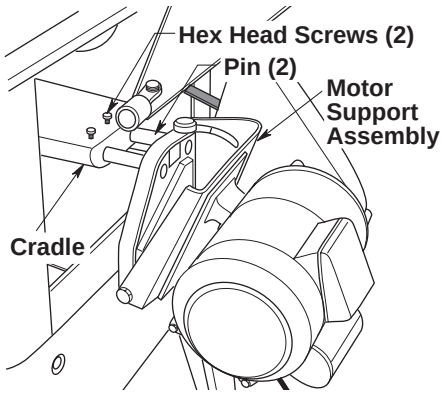
4. Place rip fence on the right hand side of table. Carefully move it against blade so that it is parallel to the blade, and just touches tips of saw teeth. Tighten rip fence lock lever.
5. Insert folded paper between spreader and fence.
6. Using M10 wrench loosen the 1/4-20 hex head screws so the spreader can slide sideways.
7. Hold spreader flat against folded paper and fence. Tighten screws using M10 inch wrench.
8. To remove blade guard and spreader, loosen thumbscrew. **Do not loosen other screws.** This allows you to remove and replace the guard for non-through cuts without disturbing the spreader alignment.



Mounting the Motor

1. Remove Motor Assembly.
2. Loosen the two hex head screws that lock the pins in the cradle.
3. Lift motor and insert the two pins on motor support assembly into holes in cradle. Push motor in as far as it will go. Do not tighten screws at this time.

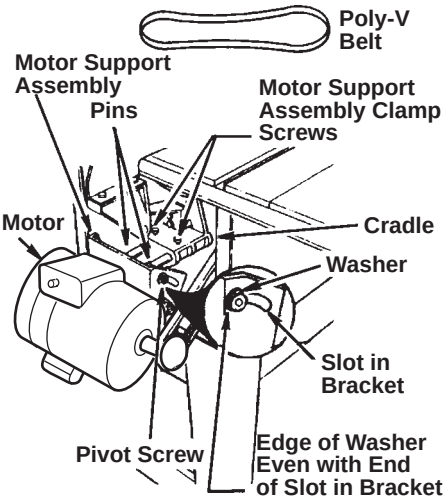


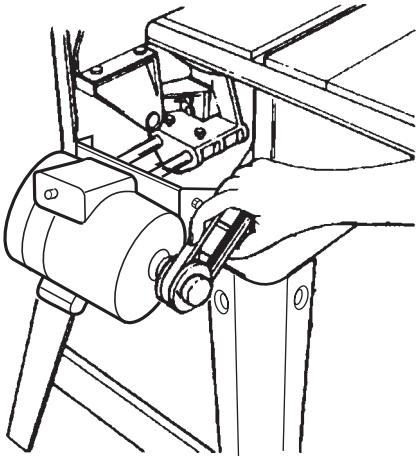


Installing Belt

1. Locate the motor belt
2. Lower the blade all the way down and set bevel to 0°.
3. Install belt on saw pulley and motor pulley.
4. Sight along edges of both pulleys check that the belt is parallel to the edges of both pulleys. If not, use a Hex "L" wrench to loosen the setscrew on the motor pulley. Reposition the motor pulley and securely tighten the set screw on the motor pulley.
5. Raise saw blade all the way up.
6. Lift motor until edge of washer (see illustration) is even with end of slot in motor support assembly. In this position, pull motor toward you (pins will slide in the cradle) until slack is removed from belt. Make sure edge of washer is still even with end of slot. Using a 1/2 inch wrench tighten the two motor support assembly clamp screws.
7. Put your hand around the belt half way between the two pulleys and squeeze belt until two sides of belt touch. The motor should move freely as you squeeze the belt. If motor does not move freely, the motor must be repositioned as described above.

NOTE: Do not attempt to tighten the pivot screw. It must slide freely in slot as the blade is raised and lowered.



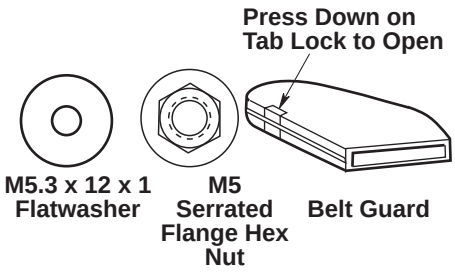


Installing Belt Guard

1. Locate the following hardware:
   - 4 Serrated Flange Hex Nuts, M5 x 0.8
   - 4 Flat Washers, M5.3 x 12 x 1

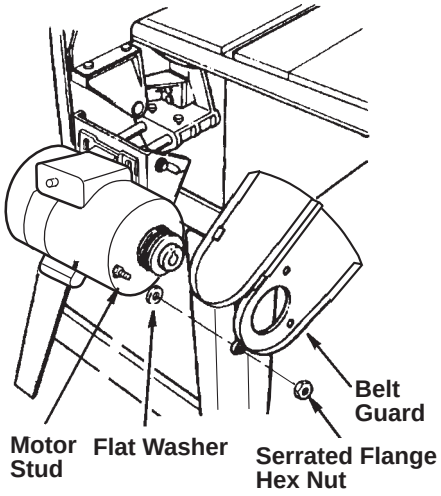
From among the loose parts find the following:

- 1 Belt Guard



Assembly (continued)

2. Lower blade all the way down and remove the motor belt.
3. Install one flat washer onto each of the four motor studs.
4. Open the hinged belt guard by pressing down on the tab lock as shown.
5. Position the guard so the large hole fits around the pulley. Insert the motor studs through the four small holes as shown.
6. Attach a serrated flange hex nut to each motor stud as shown and tighten securely.
7. Reposition the belt on the motor and arbor pulley.
8. Close the hinged cover securely until the tab snaps and locks the cover closed.
9. Check the belt clearances on the guard by raising the blade to full height using the elevation handwheel.
10. Check motor clearances by rotating the bevel handwheel located on the right side until the indicator is set at 45°.



Mounting Switch and End Caps

Locate the following hardware:

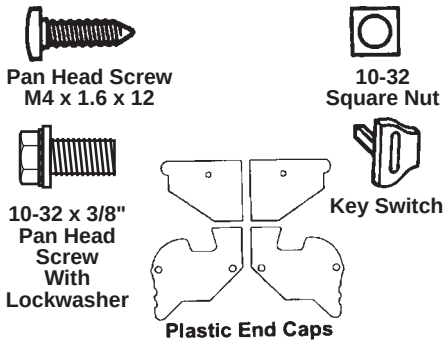
- 2 Pan Head Screws With Lockwasher, 10-32 x 3/8" Long
- 2 Square Nuts, 10-32
- 6 Pan Head Screws, M4 x 1.6 x 12

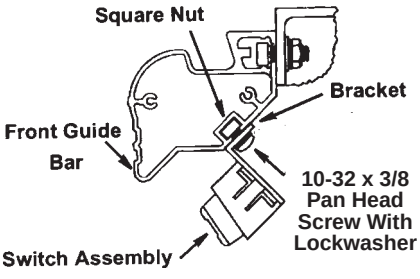
Locate the following:

- 4 Plastic End Caps
- 1 Key Switch

2. Insert the 2 10-32 x 3/8" pan head screws with lockwashers through the outermost holes in switch assembly.
3. Install the 2 square nuts on the screws so that there is an 1/8"+ clearance between the inside of the nut and the top of the switch assembly bracket.

NOTE: Switch assembly may be mounted on left or right hand side of saw.





Mounting Switch on Right Side

1. Slide the nuts into the lower slot of the front guide bar from the right end, with the switch facing front.
2. Slide switch assembly left until the left side of switch assembly is in line with right side of main saw table - tighten screws.

Mounting Switch on Left Side

1. Slide the nuts into the lower slot of the front guide bar from the left end, running wire behind unit, with switch facing front.
2. Slide the assembly right until the right side of the switch assembly is in line with the left side of the main saw table - tighten screws.

Securing Electrical Cords

Locate the following:

3 Wire Ties

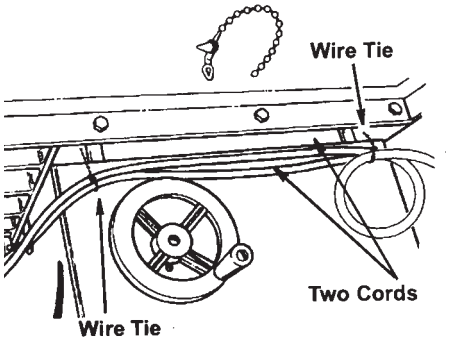
Switch Mounted on Right Side

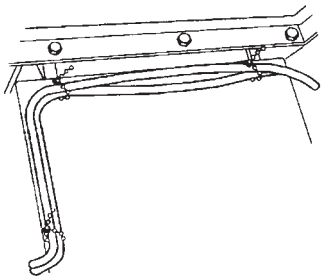
Route motor cord and power cord along right side of cabinet. Use a hammer to lightly tap the pointed tabs on the wire ties into the two holes provided on the right side of cabinet. Secure both cords in wire ties.Loop motor cord in rear wire tie to remove excess slack.

NOTE: One wire tie is extra.

Switch Mounted on Left Side

Route motor cord and power cord along left side of cabinet. Use a hammer to lightly tap the pointed tabs on the wire ties into the three holes provided on the left side of the cabinet. Secure both cords through wire ties.

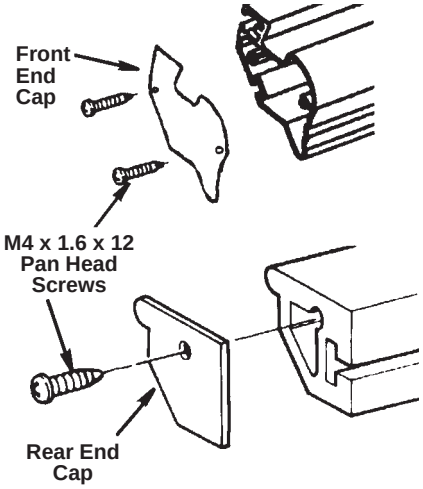




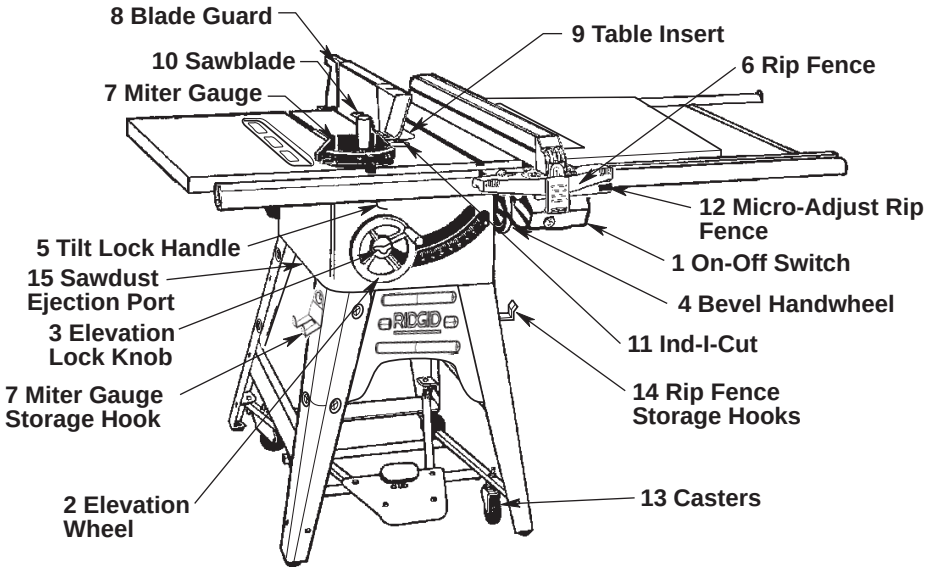
Installing Guide Bar End Caps

1. The left and right end caps for front guide bar can be installed at this time. Align the plastic end cap to match profile of bar.
2. Install self tapping M4 pan head screw into each hole.
3. The left and right end caps for rear guide bar can be installed at this time.
4. Install rear end caps as shown.

NOTE: This completes the assembly of your table saw. Do not throw away any remaining hardware until you have read the entire operator's manual.



Getting to Know Your Table Saw

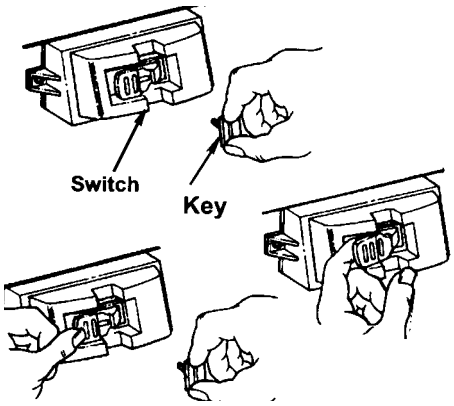


1. On-Off Switch.

WARNING: Before turning switch "ON", make sure the blade guard is correctly installed and operating properly to reduce the risk of serious personal injury.

The On-Off Switch has a locking feature. This feature is intended to help prevent unauthorized and possible hazardous use by children and others.

A. To turn saw ON, insert key, stand to either side of the blade, never in line with it, place finger under switch lever and pull end of lever out.
   After turning switch ON, always allow the blade to come up to full speed before cutting. Do not cycle the motor switch on and off rapidly, as this may cause the sawblade to loosen. In the event this should ever occur, allow the sawblade to come to a complete stop and retighten the arbor nut normally, not excessively. Never leave the saw while the power is "ON".
B. To turn saw OFF, PUSH lever in. Never leave the saw until the cutting tool has come to a complete stop.
C. To lock switch in OFF position, hold switch IN with one hand, REMOVE key with other hand.



WARNING: For your own safety, lower blade or other cutting tool below table surface. (If blade is tilted, return it to vertical, 90°, position.) Always lock the switch "OFF". When saw is not in use, remove key and keep it in a safe place. Also, in the event of a power failure (all of your lights go out) turn switch off, lock it and remove the key. This will prevent the saw from starting up again when the power comes back on.

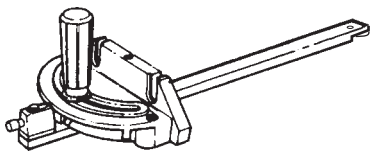
2. **Elevation Handwheel...**elevates or lowers the blade. Turn clockwise to elevate, counterclockwise to lower.
3. **Elevation Lock Knob...**locks the blade at the desired height. To loosen, turn counterclockwise. To tighten, turn clockwise.
4 **Bevel Handwheel...**tilts the blade for bevel cutting. Turn clockwise to tilt toward left, counterclockwise to tilt toward right.
   When the blade is tilted to the left as far as it will go, it should be at 45° to the table and the bevel pointer should point 45°.

NOTE: There are limit stops inside the saw which prevent the blade from tilting beyond 45° to the left and 90° to the right. (See "Adjustments and Alignments" section "Blade Tilt, or Squareness of Blade to Table").

5. **Bevel Lock Handle**...locks the blade in the desired tilt position. To loosen, turn counterclockwise. Push handle in and turn it to another position if necessary in order to tighten or loosen.

IMPORTANT: Be sure handle is hanging in the "DOWN" position before tilting blade. If it is pointing to the 1 o'clock position it may jam on underside of the table and bend the locking bolt.

6. **Rip Fence...**is locked in place by pushing the lock lever down until the lever rests on the stop. To move the fence, lift the lock lever and grasp the fence with one hand at the front.
7. **Miter Gauge...**head is locked in position for cross cutting or mitering by tightening the lock knob. Always securely lock it when in use.
   There are adjustable screw stops for the stop pin 0° and 45° right and left positions for conveniently setting the miter gauge to cut miters at these standard angles.

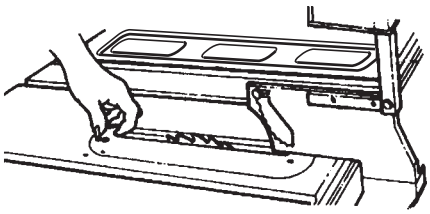


8. **Blade Guard...**must always be in place and working properly for all thru-sawing cuts. That is, all cuts where the blade cuts completely through the workpiece.
   To remove the guard for special operations, loosen the thumbscrew and slide the guard off the rod. Do not disturb the setting of the rod.
   When replacing the guard make sure the pin in the rod engages with the notch in the spreader support. Make sure the thumbscrew is tightened securely.
9. **Table Insert..**.is removable for removing or installing blade or other cutting tools.

WARNING: To reduce the risk of injury from accidental start, turn switch "OFF" and remove plug from power source before removing insert.

A. Lower the blade below the table surface.
B. Raise blade guard.
C. Loosen insert screw.
D. Lift insert from front end, and pull toward front of saw.

WARNING: Never operate saw without the proper insert in place. Use the table insert when sawing. Use the combination dado molding insert when using a dado or molding head.



Getting to Know Your Table Saw (continued)

10. Removing and Installing Saw-blade

WARNING: To reduce the risk of injury from accidental start, turn switch "OFF" and remove plug from power source outlet before removing or installing sawblade.

A. Raise blade guard, remove insert, elevate blade to its highest point.

B. To remove blade, hold arbor wrench securely, pull arbor nut wrench towards the front of the table.

C. To tighten arbor nut, hold arbor wrench securely, push arbor nut wrench towards the rear of the table.

When installing the blade, make sure the teeth are pointing toward the front of the saw and that the blade and collars are clean, and free from any burrs.

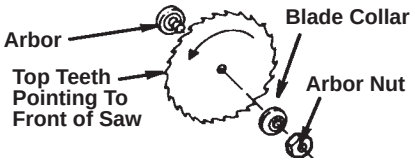
The hollow side of the collar must be against the blade.

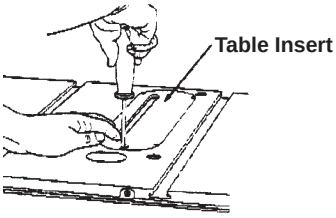
Always tighten the arbor nut securely.

NOTE: When using the dado or molding head, it is not necessary to install the outer (loose) blade collar.

D. Lower the blade below the table.

E. To replace insert, place insert into opening in table and push toward rear of saw to engage rear spring on insert and until keyslot in insert will drop over screw. Tighten screw. Do not tighten screw to the point where it will deflect the insert.





WARNING: To reduce the risk of injury from a thrown workpiece, blade parts, or blade contact, never operate saw without the proper insert in place. Use the table insert when sawing. Use the proper size dado/molding insert for dado blades and molding heads.

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before making any adjustments.

11. Ind-I-Cut

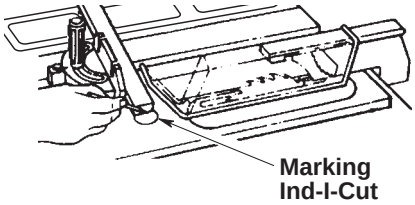
The plastic disc embedded in the table in front of the sawblade, is provided for marking the location of the "sawcut" (kerf) on the workpiece.

Check disk location: If it is above table surface, place a piece of hardwood on top of it and tap it down with a hammer.

Marking the Ind-I-Cut:

A. With blade 90° (square to table) and miter gauge in left groove, cross cut a piece of wood holding the wood firmly against miter gauge.

B. Pull miter gauge back until freshly cut edge of wood is over disk. Using a sharp pencil, mark a line on disk at freshly cut edge of wood.

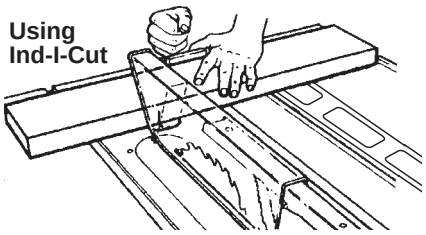


C. With miter gauge in right hand groove, follow same procedure and mark another line on disk.

D. These lines indicate the “path” of the cut (kerf) made by the sawblade.

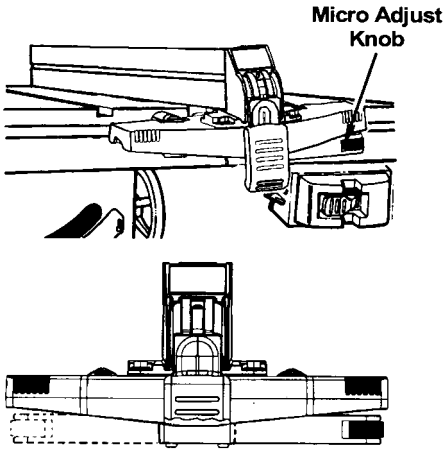
E. When cutting the workpiece, line up mark on workpiece with line on disk.

NOTE: When the blade is changed, or a dado/molding head installed these lines will need to be erased and reset.



12. Micro-Adjust Rip Fence...allows the operator to accurately adjust the rip fence using only one hand. To move the fence push in on the micro-adjust knob and rotate.

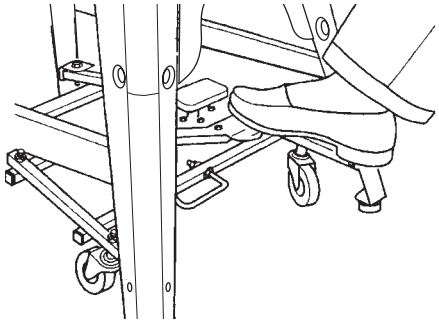
The microadjust mechanism may be converted to operate on the left hand side of the fence. Simply remove two Phillips head screws - rotate the micro adjust mechanism 180° and reinstall screws.

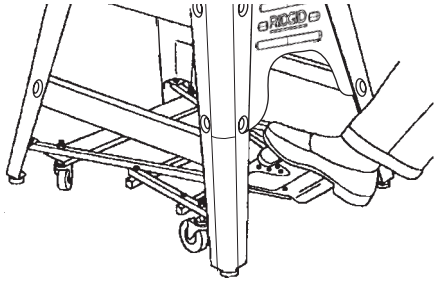


13. Herc-U-Lift™ Caster Opera-tion

The caster set is activated by pressing down on the metal platform. This will raise the table saw and allow the saw to be moved to desired location.

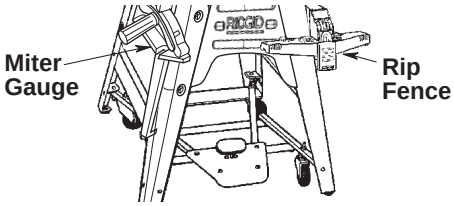
To lower the table saw, press down on the foot pedal. Make sure the saw firmly rests on the floor. Adjust the rubber leveling feet if necessary.





14. Storage Hooks

Conveniently holds rip fence and miter gauge when not in use.

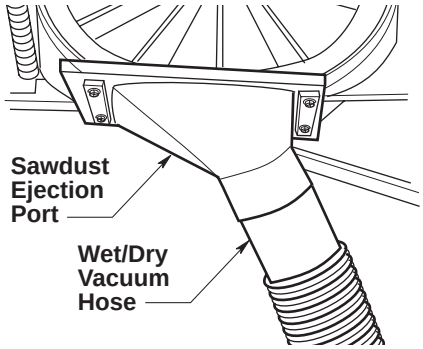


Getting to Know Your Table Saw (continued)

15. Sawdust Ejection Port

Your table saw is equipped with a vacuum hookup. This feature will allow you to attach any standard 2-1/2 inch diameter wet/dry vacuum hose into the hole provided for convenient sawdust removal. If large scraps become lodged in the sawdust collector it may be necessary to remove the blade cover. To remove the blade cover, pull the two metal latches “inward”, tilt blade cover away from blade and lift up. Remove scraps and replace blade cover.

WARNING: Sawdust can clog motor. Motor could ignite sawdust. Even if saw is connected to vacuum, blow out sawdust regularly to reduce the risk of fire.



Zero Clearance Insert...supports the workpiece right next to the blade to help prevent chipping and splintering. Also helps to prevent small off-fall pieces from becoming wedged between the blade and the large opening in conventional table insert.

Zero Clearance Insert

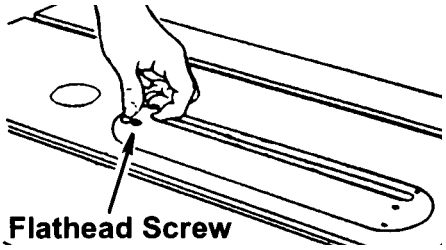
Additional Safety Instructions When Using Zero Clearance Insert

1. Always turn the table saw power switch “OFF” and remove plug from power source outlet before removing or installing the insert.
2. Always wear safety goggles, not glasses complying with ANSI Z87 (or in Canada CSA Z94.3-99) shown on package.
3. Make sure the sawblade or dado blade is not in contact with the insert before turing the saw “ON”.
4. Do not attempt to tilt the arbor while any blade is in the insert. The blade may bind, causing possible damage.
5. For initial installation the zero clearance insert must be securely clamped down with a board before plunging the blade up through it to cut a kerf.
6. When using blade stabilizers, check for proper clearance before raising the blade.

Remove the Existing Table Insert.

WARNING: To reduce the risk of injury from accidental start make sure switch is "OFF" and saw is unplugged before removing insert.

1. Make sure saw is off and unplugged.
2. Loosen the flathead screw that secures the insert.
3. Lift the insert from the front end and pull toward the front of the saw.



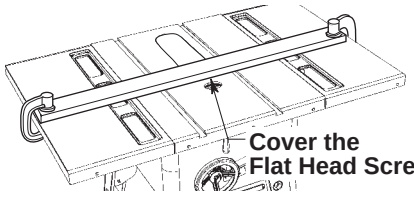
Installing Zero Clearance Insert/Sawblade

WARNING: To reduce the risk of injury from accidental start make sure switch is "OFF" and saw is unplugged before installing zero clearance insert/sawblade.

1. Lower the sawblade completely.
2. Tighten the flat head screw that secures the insert completely, then loosen screw 3 turns.
3. Place the zero clearance insert in the table slot and push toward the rear of the saw to engage the spring clip.
4. Drop the front edge of the zero clearance insert on top of the flat head screw.

NOTE: Front of insert will be above the table to allow clearance for sawblade.

5. Adjust the side positioning set screw found on edge of insert to eliminate side play as required.
6. Clamp a 1 x 4 or larger board across the zero clearance insert as shown. Make sure the board covers the flat head screw.

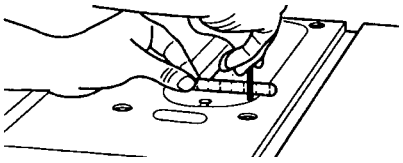


7. Make sure blade guard is properly installed.
8. Reconnect power to the saw.
9. Turn the saw "ON".
10. Slowly and cautiously raise the saw blade into the zero clearance insert by rotating the elevation handle clockwise 4 turns. Return the saw blade to completely lowered position.

WARNING: To reduce the risk of injury keep both hands off of the saw table top and wear approved safety goggles.

11. Turn the saw "OFF" and unplug.
12. Remove clamps and board.
13. Loosen the flat head screw and reposition the zero clearance insert until the key slot drops over the flat head screw.
14. The zero clearance insert should be flush with the table top. Check near each set screw as shown. Adjust the four set screws as necessary. Tighten the flat head screw. Do not tighten the screw to the point where it deflects the zero clearance insert.

WARNING: The zero clearance insert must be even with the table surface. Inserts too high or low can let the workpiece "snag" or catch on uneven edges. Workpiece could twist and kickback. Failure to heed this warning could result in serious personal injury.



Installing Zero Clearance Insert/Dado Blades

WARNING: To reduce the risk of injury from accidental start, make sure switch is "OFF" and saw is unplugged.

NOTE: Before using the dado blade read and understand the Safety and Operating instructions contained in the operators manual furnished with your table saw and the instructions furnished with your dado blade.

1. Adjust the dado blade to the desired width and mount on table saw arbor. Tighten arbor nut.

   Do not install the outer loose collar (the one next to the arbor nut) when installing the dado blade.
2. If necessary, loosen the flat head screw and position the zero clearance insert until the key slot drops over the flat head screw.
3. Adjust the side positioning set screw found on edge of insert to eliminate side play (See "Installing Zero Clearance Insert").
4. The zero clearance insert should be flush with the table top. Check near each set screw (see "Installing Zero Clearance Insert"). Adjust the four set screws as necessary. Tighten the flat head screw. Do not tighten the screw to the point where it deflects the zero clearance insert.

WARNING: The zero clearance insert must be even with the table surface. Inserts too high or low can allow the workpiece to "snag" or catch on uneven edges. Workpieces could twist and kickback. Failure to heed this warning could result in serious personal injury.

5. Make sure blade guard is properly installed.
6. Reconnect power to the saw
7. Turn the saw "ON".
8. Slowly and cautiously raise the dado blade into the zero clearance insert by rotating the elevation handle clockwise.

WARNING: To reduce the risk of injury keep both hands off of the saw table top and wear approved safety goggles.

9. Turn the saw "OFF" and unplug.
10. Remove the blade guard. The blade guard is not used for "non-through" cuts.
11. The table saw and zero clearance insert are now ready to use. When replacing the sawblade insert, always replace the blade guard.

Operation Tips

- Do not use the zero clearance insert for molding operations. Use an 8" Dado/ Molding Insert.
- The zero clearance insert supports the work pieces right next to the blade to help prevent chipping and splintering. It also prevents small pieces from becoming wedged between the blade and the large opening in a conventional table insert.
- For best results raise the blade only high enough to cut through the work-piece.
- For best results a separate zero clearance insert should be used for each blade, dado blade, or different setup.
- When making bevel cuts:

a. Install the zero clearance insert with the blade at 90°. See Installing "Zero Clearance Insert" section of this manual.
b. Bevel the blade to the required setting.
c. Slowly and cautiously raise the saw blade into the zero clearance insert by rotating the elevation handle clockwise.

- If using blade stabilizers, check for proper clearance before raising the saw blade.
- When using a dado blade, follow the procedures above. However, use additional caution due to the large amount of material being “cut-away” from the zero clearance insert.
- Rotate the dado blade manually, (don’t touch it with your fingers, but use a stick of wood) to be sure it clears the insert before connecting the power cord to the electrical outlet in your shop.
- Never operate the saw without the proper insert installed.
- When replacing the sawblade and table insert, always replace the blade guard.

Safety Instructions for Basic Saw Operations

Before Each Use

Inspect your saw.

- To reduce the risk of injury from accidental starting, turn the switch off, unplug the saw, and remove the switch key before raising or removing the guard, changing the cutting tool, changing the setup, or adjusting anything.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, saw stability, and any other conditions that may affect the way the saw works.
- If any part is missing, bent or broken in any way, or any electrical part does not work properly, turn the saw off and unplug the saw.
- Replace damaged or missing parts before using the saw again.
- Use the sawblade guard, spreader and anti-kickback pawls for any thru-sawing (whenever the blade comes through the top of the workpiece). Make sure the anti-kickback pawls work properly. Make sure the spreader is in line with sawblade.
- Remove adjusting keys and wrenches. Form a habit of checking for and removing keys and wrenches from table top before turning saw on.
- Make sure all clamps and locks are tight and no parts have excessive play.

To Reduce the Risk of Injury From Jams, Slips Or Thrown Pieces (Kickbacks Or Throwbacks)

Inspect Your Blade.

- Choose the right blade or cutting accessory for the material and the type of cutting you plan to do.
- Never use grinding wheels, abrasive cutoff wheels, friction wheels (metal cutting blades) wire wheels or buffing wheels. They can fly apart explosively.
- Cut only wood, wood like or plastic materials. Do not cut metal.
- Choose and inspect your cutting tool carefully:

- To reduce the risk of cutting tool failure and thrown shrapnel (broken pieces of blade), use only 10” or smaller blades or other cutting tools marked for speeds of 5000 rpm or higher.

Safety Instructions for Basic Saw Operations (continued)

- Always use unbroken, balanced blades designed to fit this saw's 5/8 inch arbor.
- When thru-sawing (making cuts where the blade comes through the workpiece top), always use a 10 inch diameter blade. This keeps the spreader in closest to the blade.
- Do not over tighten arbor nut. Use arbor wrenches to "snug" it securely.
- Use only sharp blades with properly set teeth. Consult a professional blade sharpener when in doubt.
- Keep blades clean of gum and resin.
- Never use the saw without the proper blade insert.

Inspect your work area.

- Keep work area clean.
- Cluttered areas and benches invite accidents. Floor must not be slippery from wax or sawdust.
- To reduce the risk of burns or other fire damage, never use the saw near flammable liquids, vapors or gases.
- To reduce the risk of injury, don't do layout, assembly, or setup work on the table while blade is spinning. It could cut or throw anything hitting the blade.

Plan your work

- Use the right tool. Don't force tool or attachment to do a job it was not designed for.

Inspect your workpiece.

- Make sure there are no nails or foreign objects in the part of the workpiece to be cut.
- When cutting irregularly shaped workpieces, plan your work so it will not slip and pinch the blade:
- A piece of molding for example, must lie flat or be held by a fixture of jig that will not let it twist, rock or slip while being cut. Use jigs or fixtures where needed to prevent workpiece shifting.
- Use a different, better suited type of tool for work that can't be made stable.

Plan your cut.

- To reduce the risk of kickbacks and throwbacks which occur when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw:
- Never cut **Freehand**. Always use either a rip fence, miter gauge or fixture to position and guide the work, so it won't twist or bind on the blade and kickback.
- Make sure there's no debris between the workpiece and its supports.
- Use extra caution with large, very small or awkward workpieces.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top. Never use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic saw table, or to help feed, support or pull the workpiece.

- Never confine the piece being cut off, that is, the piece not against the fence, miter gauge or fixture. Never hold it, clamp it, touch it, or use length stops against it. It must be free to move. If confined, it could get wedged against the blade and cause a kickback or throwback.
- Never cut more than one workpiece at a time.
- Never turn your table saw "ON" before clearing everything except the workpiece and related support devices off the table.

Plan Ahead To Protect Your Eyes, Hands, Face and Ears

Dress for safety

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To reduce the risk of possible hearing damage, wear ear plugs or muffs when using table saw for hours at a time.
- Any power saw can throw foreign objects into the eyes. This can result in permanent eye damage. Always wear safety goggles, not glasses, complying with ANSI Z87.1 (or in Canada CSA Z94.3-99) shown on package. Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at many local retail stores. Glasses or goggles not in compliance with ANSI or CSA could seriously hurt you when they break.

- For dusty operations, wear a dust mask along with safety goggles.

Plan the way you will push the workpiece through.

- **Never pull the workpiece through.** Start and finish the cut from the front of the table saw.
- **Never put your fingers or hands in the path** of the sawblade or other cutting tool.
- **Never reach in back** of the cutting tool with either hand to hold down or support the workpiece, to remove wood scraps, or for any other reason.
- Reduce the Risk of hand positions where a sudden slip could cause fingers or a hand to move into a sawblade or other cutting tool.
- Don't overreach. Always keep good footing and balance.
- Push the workpiece against the rotation of the blade, never feed material into the cutting tool from the rear of the saw.
- Always push the workpiece all the way past the sawblade.
- As much as possible, keep your face and body to one side of the sawblade, out of line with a possible kickback or throwback.
- Set the cutting tool as low as possible for the cut you're planning.

Reduce the Risk of Accidental Starting.

- Make sure switch is "OFF" before plugging saw into a power outlet.

Safety Instructions for Basic Saw Operations (continued)

Whenever Sawblade Is Spinning

WARNING: Don't allow familiarity (gained from frequent use of your table saw) cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

- Before actually cutting with the saw, watch it while it runs for a short while. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting the problem.
- Make sure the top of the arbor or cutting tool turns toward the front of the saw.

Keep Children Away.

- Keep all visitors a safe distance from the table saw.
- Make sure bystanders are clear of the table saw and workpiece.

Don't Force Tool.

- Let the blade reach full speed before cutting.
- It will do the job better and safer at its designed rate.
- Feed the workpiece into the saw only fast enough to let the blade cut without bogging down or binding.

Before freeing jammed material.

- Turn switch "OFF".
- Wait for all moving parts to stop.
- Unplug the saw.
- Check blade, spreader and fence for proper alignment before starting again.

To reduce the risk of throwback of cut off pieces.

- Use the guard assembly.

To remove loose pieces beneath or trapped inside the guard.

- Turn saw "OFF".
- Remove switch key.
- Wait for blade to stop before lifting the guard.

Before Leaving The Saw.

- Turn the saw off.
- Wait for blade to stop spinning.
- Unplug the saw.
- Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

Work Feed Devices

Before cutting any wood on your saw, study all of the **"Basic Saw Operations"**.

As you learn new table saw woodworking techniques, you'll see that many types of cuts need different supportand feeding devices, known as jigs or fixtures.They can help you make cuts more accurately. By helping to steady the workpiece and keep you away from the blade, they can help you safely use your saw for certain cuts.

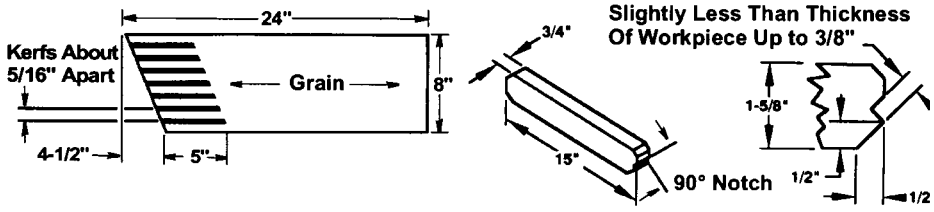
Many people custom build their own jigs and fixtures. Jigs and fixtures are often designed for a particular cut.

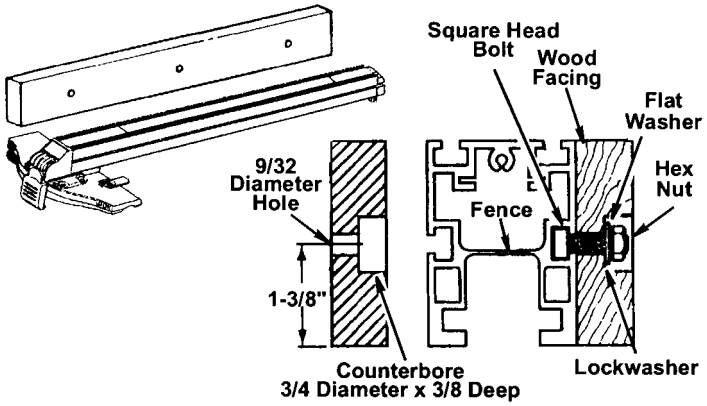
You can use your table saw to easily make many jigs and fixtures. To get you started, we've included instructions for some simple ones. After you have made a few practice cuts, make up these jigs before starting any projects.

The use of these devices is explained in "Basic Saw Operation" section.

Attaching Wood Face Board

1. A T-slot is provided in the rip fence for attaching a wood facing when using the dado head, or molding head, featherboards or other jigs and fixtures.
2. Select a piece of smooth straight wood approximately 3/4 inch thick, and the same length as the rip fence.
3. To fasten wood face to the fence use the three 1/4"20 x 3/4" square head bolts, lock-washers, flat washers and nuts supplied. Counterbore three 3/4" dia. holes 3/8" deep into the 3/4" board at the dimen-sion shown. Avoid placing screws directly over blade.
4. Drill a 9/32" clearance hole through the board at each counterbore location.





Work Feed Devices (continued)

Push Block

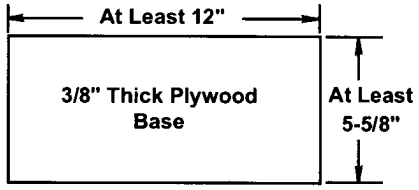
There are any number of ways to properly cut your workpieces to make a push block. The following steps describe one way you can make a push block.

Making the base:

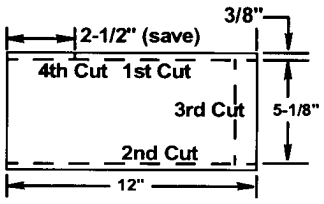
- Start with a piece of 3/8 inch plywood at least 5-5/8 inches wide or wider and 12 inches long or longer.
- Make two ripcuts. Perform the first ripcut along the side of the 3/8" wide strip. Next, ripcut the 3/8" plywood to a width of 5-1/8".
- Crosscut the 3/8" plywood to 12" long.
- Crosscut a 2-1/2" piece off the 3/8" wide by 3/8" thick strip and save this short piece for later.

The next cuts will create the 3/8" by 9-1/2" notch in the base. Mark the long edge of the board 2-1/2" from one end. Make a crosscut into the edge on the mark, stop-ping about 3/4" into the board. Set the saw and rip the width to 4-3/4" along the same edge as the stopped crosscut. Stop the ripcut where the two cuts intersect. Turn off the saw and remove the base piece. The base should now measure as shown.

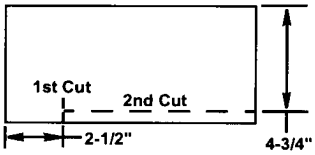
Material for Push Block



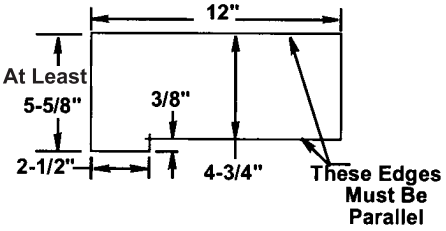
Cutting Out the Base



Creating the Notch



Finished Base



Making the handle:

- Miter crosscut a piece of 3/4 inch thick plywood to shape and size shown:

NOTE: The mitered corners can be any size that looks like the drawing (about 1-1/2" by 1-1/2").

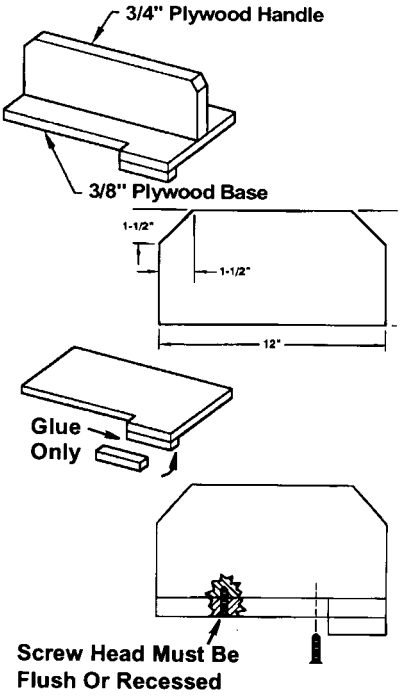
Putting it Together

- Using good quality woodworking glue, glue the 3/8" x 3/8" x 2-1/2" piece strip saved earlier to the base as shown.

IMPORTANT: Do not use nails or screws. This is to prevent dulling of the sawblade in the event you cut into the push block.

- Position the handle at the center of the plywood base as shown. Fasten them together with glue and wood screws.

IMPORTANT: Make sure the screw heads do not stick out from the bottom of the base, they must be flush or recessed. The bottom must be flat and smooth enough to slide along the auxiliary fence you are now ready to make.



Auxiliary Fence

Making the base:

- Start with a piece of 3/8 inch plywood at least 5-1/2 inches wide or wider and 30 inches long or longer.
- Cut the piece to shape and size shown:

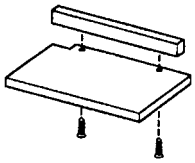
Making the side:

- Start with a piece of 3/4 inch plywood at least 2-3/8 inches wide or wider and 27 inches long or longer.
- Cut the piece to shape and size shown:

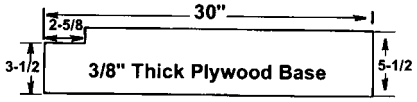
Putting it together:

- Put the pieces together, as shown:

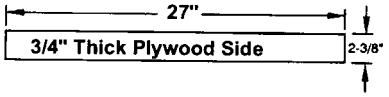
IMPORTANT: Make sure the screw heads do not stick out from the bottom of the base, they must be flush or recessed. The bottom must be flat and smooth enough to rest on the saw table without rocking.



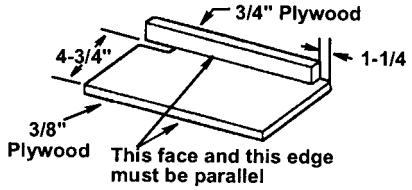
Cutting Out the Base



Cutting Out the Side



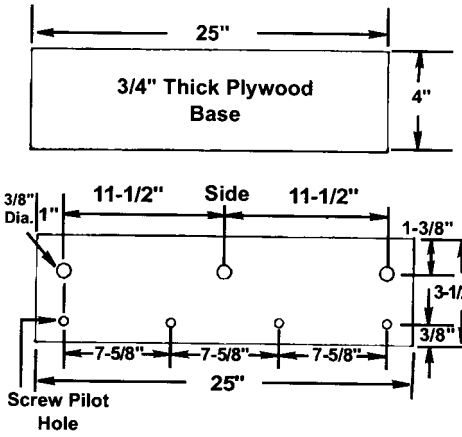
Finished Auxiliary Fence



Work Feed Devices (continued)

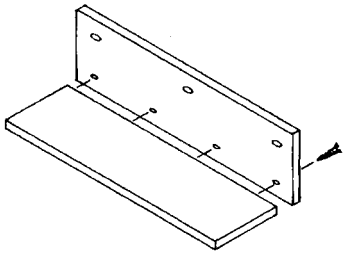
Work Support for Material over 26" Wide

When ripping material in excess of 26" wide, install this fence extension to support the edge of the work and prevent material from sliding under rip fence.



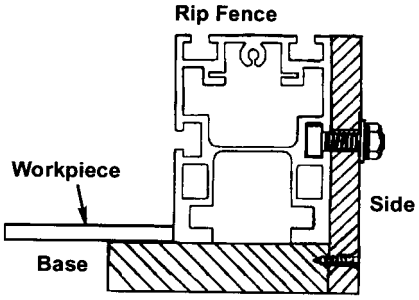
Making the base:

- Start with a piece of 3/4" plywood at least 4" wide and at least 25" long.
- Cut the base to size as shown.



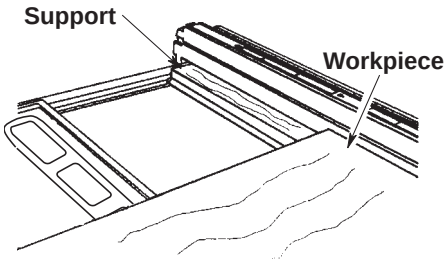
Making the side:

- Start with a piece of 1/2" plywood at least 3-1/2" wide and 25" long.
- Cut the side to size as shown.
- Putting it together:
- Drill holes in side as shown.
- Put the pieces together as shown.
- Install four wood screws at least #8 x 1-1/4" long in lower holes.



Install extension:

- Slide three 1/4-20 x 1" long square or hex head bolts into T-slot away from blade.
- Align bolts with 3/8" holes. Place the side against the fence with the base extending under the fence as shown.
- Install a flat washer and 1/4-20 nut on each bolt. Hold device tight against side and bottom of fence and tighten nuts.



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Using the Miter Gauge

The miter gauge is used when crosscutting, miter cutting, bevel cutting, compound miter cutting, dadoing and when rabbeting across the end of a narrow workpiece.

WARNING: For your own safety, read and always observe all safety precautions listed in operators manual and on saw.

Additional Safety Instructions for Crosscutting

Before Starting:

- Never use the rip fence when cross-cutting except as specifically instructed.
- An auxiliary wood facing attached to the miter gauge can help prevent workpiece twisting and throwbacks. Attach it to the slots provided. Make the facing long enough and big enough to support your work. Make sure, however, it will not interfere with the sawblade guard.
- Use jigs or fixtures to help hold any piece too small to extend across the full length of the miter gauge face during the cut. This lets you properly hold the miter gauge and workpiece and helps keep your hands away from the blade.

While cutting:

- To reduce the risk of blade contact, always hold the miter gauge as shown in the this section.

Crosscutting

Definition: A cutting or shaping operation made across the width of a workpiece.

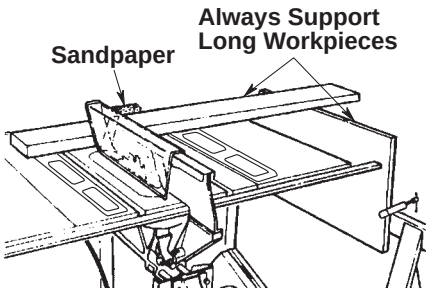
The graduations on the miter gauge provide ample accuracy for average wood-working. In some cases where extreme accuracy is required, make a trial cut and then recheck it with a precision square, or protractor.

NOTE: The space between the miter gauge bar and the groove in the table is held to a minimum during manufacturing.

For maximum accuracy when using the miter gauge, always favor one side of the groove in the table. In other words, don't move the miter gauge from side to side while cutting but keep one side of the bar riding against one side of the groove.

NOTE: Gluing a piece of sandpaper to the face of the miter gauge head can help prevent the workpiece from "creeping" while it is being cut.

The miter gauge head is locked in position by twisting the lock knob clockwise. Always tighten it securely when in use.



WARNING: To reduce the risk of injury from blade contact or kickback, hold miter gauge properly.

The miter gauge may be used in either of the grooves in the table.

When using the miter gauge in the left hand groove, hold the workpiece firmly against miter gauge head with your left hand, and grip the lock knob with your right hand.

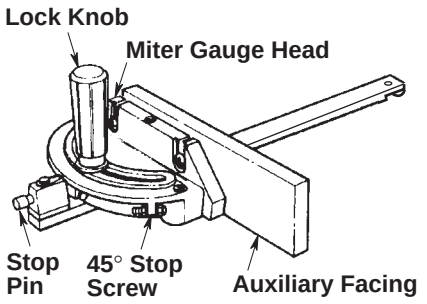
When using the miter gauge in the right hand groove, hold the workpiece with your right hand and the lock knob with your left hand.

Basic Saw Operations (continued)

Slots are provided in the miter gauge for attaching an auxiliary facing to make it easier to cut very long or short pieces. Select a suitable piece of smooth wood, drill two holes through it and attach with screws. Make sure the facing does not interfere with the proper operation of the sawblade guard.

When cutting long workpieces, you can make a simple support by clamping a piece of plywood to a sawhorse. (As seen on previous page.)

Use the hold-down clamp (optional accessory) on the miter gauge for greater accuracy.



Repetitive Crosscutting

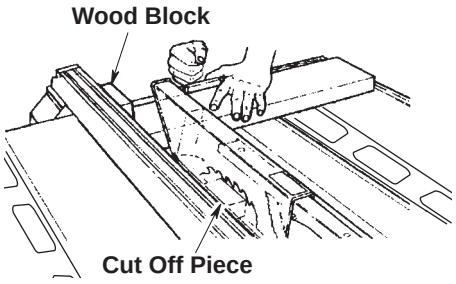
Definition: Cutting a quantity of pieces the same length without having to mark each piece.

- Follow all safety precautions and operational instructions for cross cutting.
- When making repetitive cuts from a long workpiece, make sure it is adequately supported.

WARNING: Never use the rip fence as a direct length stop because the cutoff piece could bind between the fence and the blade causing a kickback.

- When making repetitive cuts shorter than 6 inches, attach a block of wood 3” long to the fence at desired length to act as a length stop. A T-slot is provided in the rip fence for attaching the wood block. See “Work Feed Devices/Attaching Wood Face Board” section of this manual.
- Slide the workpiece along the miter gauge until it touches the block... hold the workpiece securely against the miter gauge or clamp it with the hold-down clamp (optional accessory not shown).
- Make the cut...turn the saw off... remove the piece after the blade has stopped and before cutting the next piece.

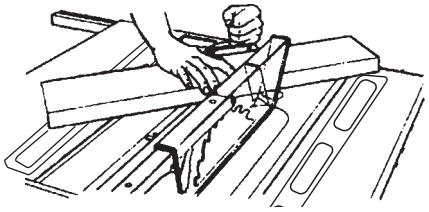
WARNING: To reduce the risk of kickback from twisting the workpiece, clamp the block so the end of the block is well in front of the sawblade. Be sure it is clamped securely.



Miter Crosscutting

Miter cutting is known as cutting wood at an angle other than 90° with the edge of the wood. Follow the same procedure as you would for crosscutting.

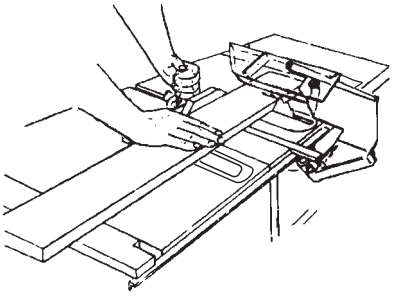
- Adjust the miter gauge to the desired angle, and lock it.
- The miter gauge may be used in either of the grooves in the table. Make sure it is locked.
- When using the miter gauge in the left hand groove, hold the workpiece firmly against the miter gauge head with your left hand, and grip the lock knob with your right hand.
- When using the miter gauge in the right hand groove, hold the workpiece with your right hand and the lock knob with your left hand.



Bevel Crosscutting

Bevel crosscutting is the same as cross-cutting except that the wood is cut at an angle...other than 90° with the bottom flat side of the wood.

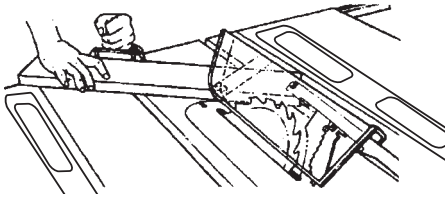
- Adjust the blade to the desired angle.
- Always use the miter gauge in the groove to the right of the blade. It cannot be used in the groove to the left because the blade guard will interfere. Hold the workpiece with your right hand and the lock knob with your left hand.
- Use the auxiliary fence/work support for additional support of the workpiece.



Compound Crosscutting

Compound cutting is a combination of miter cutting and bevel crosscutting. The cut is made at an angle other than 90° to both the edge and the bottom flat side of the wood.

- Adjust the miter gauge and the blade to the desired angle...Make sure miter gauge is locked.



Basic Saw Operations (continued)

Using the Rip Fence

Ripping, bevel ripping, resawing and rabbeting are performed using the rip fence together with the auxiliary fence/work support, push stick or push block.

WARNING: For your own safety, read and always observe all safety precautions listed in manual and on saw.

Additional Safety Instructions for Rip Cuts

- Never use the miter gauge when ripping
- Use a push stick whenever the fence is 2 inches or more from the blade.
- When thru-sawing, use an auxiliary fence and push block whenever the fence must be between 1/2 and 2 inches from the blade.
- Never thru-saw rip cuts narrower than 1/2 inch.
- Never rip anything shorter than 10" long.
- When using a push stick or push block, the trailing end of the workpiece must be square. A push stick or block against an uneven end could slip off or push the workpiece away from the fence.
- A featherboard can help guide the workpiece. (See "Basic Saw Operation - Using Featherboards for Thru-Sawing" section.)
- Always use featherboards for any non thru-sawing rip type cuts. (See "Basic Saw Operations - Using Featherboards for Non Thru-Sawing" section.)

Before Starting:

- To reduce the risk of kickbacks and slips into the blade, make sure the rip fence is parallel to the sawblade.
- Before thru-sawing, check the anti-kickback pawls. the pawls must stop a kickback once it has started. Replace or sharpen anti-kickback pawls when points become dull.

Plastic and composition (like hard board) materials may be cut on your saw. However, since these are usually quite hard and slippery, the anti-kickback pawls may not stop a kick-back. Therefore, be especially careful in your setup and cutting procedures.

While Thru-sawing:

To reduce the risk of kickbacks and slips into the blade, always push forward on the section of the workpiece between the sawblade and the rip fence. Never push forward on the piece being cut off.

Ripping

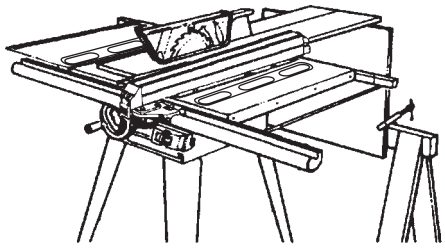
Definition: Cutting operation along the length of the workpiece.

Position the fence to the desired width of rip and lock in place.

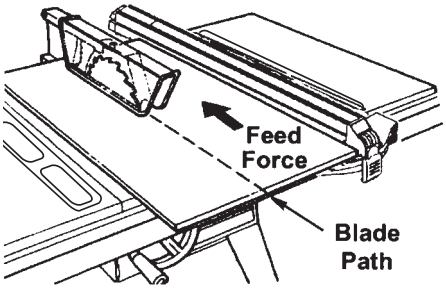
Before starting to rip, be sure:

1. Rip fence is parallel to sawblade.
2. Spreader is properly aligned with sawblade.
3. Anti-kickback pawls are functioning properly.

When ripping long boards or large panels, always use a work support. A simple support can be made by clamping a piece of plywood to a sawhorse.



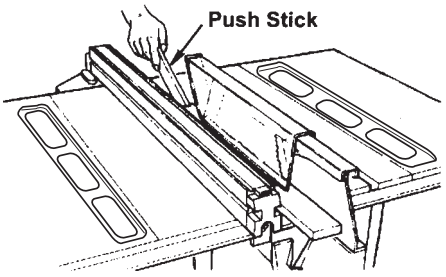
WARNING: To reduce the risk of kickback, push forward only on the part of the workpiece that will pass between the blade and the fence.



Keep your hands out of the blade path.

Feed the workpiece by pushing forward only on the part of the workpiece that will pass between the blade and the fence.

Stop your left thumb at the front edge of the table. Finish the cut with the appropri-ate pusher.



Once the trailing end is on the table:

When “width of rip” is 2” or wider, use the push stick to finish the work all the way past the blade.

Basic Saw Operations (continued)

When “width of rip” is narrower than 2” the push stick cannot be used because the guard will interfere...use the auxiliary fence and push block.

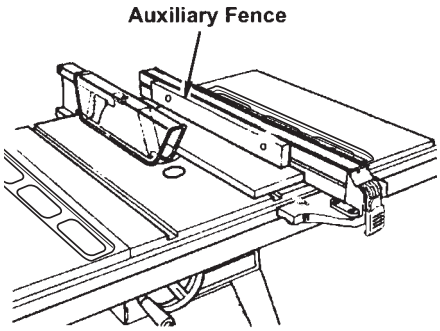
Use the T-slots in the rip fence to attach the auxiliary fence. See “Work Feed Devices/Attaching Wood Face Board” section of this manual

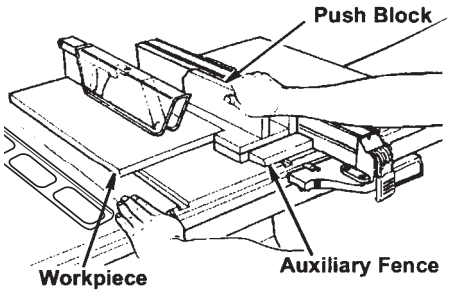
Feed the workpiece by hand along the auxiliary fence until the end is approximately 1” past the front edge of the table. Continue to feed using the push block.

Hold the workpiece in position and install the push block by sliding it on top of the auxiliary fence/work support (this may raise guard).

WARNING: To reduce the risk of injury from blade contact never thru-saw cuts narrower than 1/2" wide.

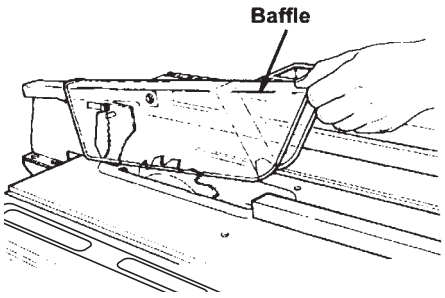
Narrow strips thicker than the auxiliary fence/work support may enter the guard and strike the baffle. Carefully raise guard only enough to clear the workpiece. Use push block to complete cut.





Bevel Ripping Narrow Work

When bevel ripping material 6” or narrower, use fence on the right side of the blade only. This will provide more space between the fence and the sawblade for use of a push stick. If the fence is mounted to the left, the sawblade guard may interfere with proper use of a push stick.



Using Featherboards for Thru-Sawing

Featherboards are not employed for thru-sawing operations when using the miter gauge.

Featherboards are used to keep the work in contact with the fence and table as shown, and to help stop kickbacks.

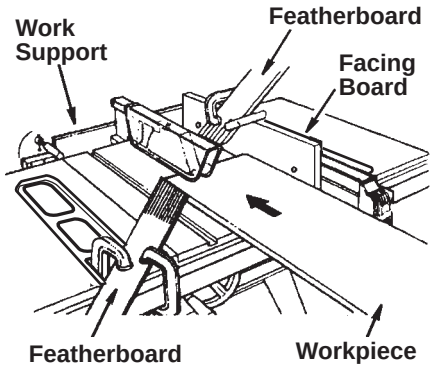
Use the T-slots in the rip fence to attach a 7-1/2" high flat facing board, the full length of the fence, as shown.

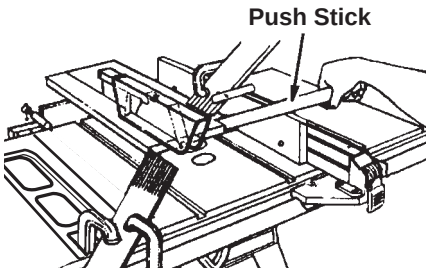
Mount featherboards to facing board and table as shown, so that leading edges of featherboards will support workpiece.

WARNING: Make sure the featherboard against the edge presses only on the uncut portion (in front of the blade). It might otherwise pinch the blade in the kerf and cause a kickback.

Before starting the operation (switch "OFF" and blade below table surface):

1. Install featherboards so they exert pressure on the workpiece; be positive they are securely attached.
2. Make sure by trial that the featherboards will stop a kickback if one should occur.





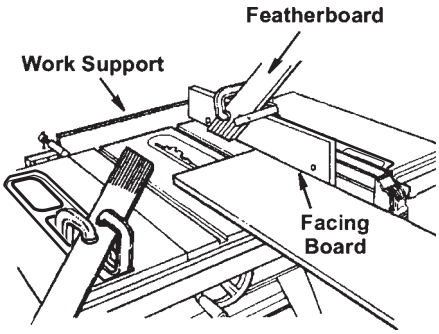
Using Featherboards for Non Thru-Sawing

Featherboards are not employed during non thru-sawing operations when using the miter gauge.

Use featherboards for all other non thru-sawing operations (when sawblade guard must be removed). Featherboards are used to keep the work in contact with the fence and table as shown and to stop kickbacks.

Use the T-slots in the rip fence to attach a 7-1/2" high flat facing board, the full length of the fence, as shown.

WARNING: Always use push blocks, push sticks and featherboards when making non-through cuts to reduce the risk of serious personal injury.



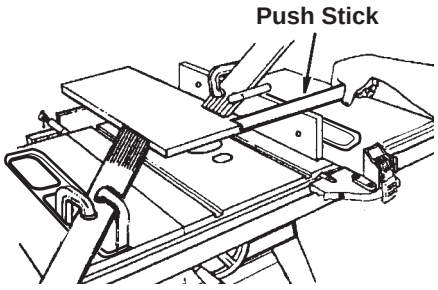
Basic Saw Operations (continued)

Mount featherboards to facing board and table as shown, so that leading edges of featherboards will support workpiece until cut is complete, and the workpiece has been pushed completely past the cutter (sawblade, dado-head, etc.) with a push stick, as in ripping.

Before starting the operation (switch "OFF" and blade below table surface):

1. Install featherboards so they exert pressure on the workpiece; be positive they are secure.
2. Make sure by trial the featherboards will stop a kickback if one should occur.

WARNING: For your own safety, replace the sawblade guard as soon as the non thru-sawing operation is complete.



Resawing

Resawing is a rip cut made in a piece of wood through its thickness. The piece is typically positioned on its edge. If the piece is narrower than 3-3/8" it can be resawn in one pass with the blade guard in place. Extra supports or fixtures will be required when the edge resting on the table is too narrow for the piece to be stable and when the fence interferes with the blade guard. (See method described below)

WARNING: Do not attempt to resaw bowed or warped material. It can't be properly supported. It could kickback or bind.

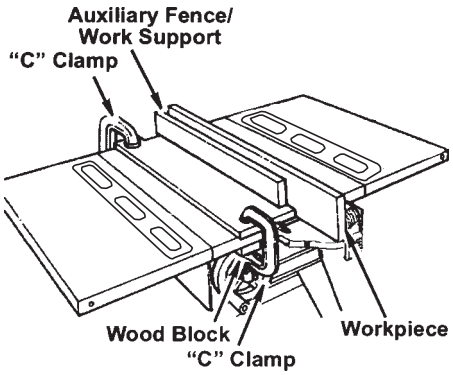
NOTE: To resaw a piece of wood wider than 3-3/8", or a piece needing extra support, it will be necessary to remove the blade guard and use the auxiliary fence/work support. (See "Workfeed Devices".)

Clamp the auxiliary fence/work support to the table so that the workpiece will slide easily without binding between the two fences and it will not tilt or move sideways.

Do not clamp directly to the bottom edge of the table because the "swivel" of the clamp will not grip properly. Place a small block of wood between the bottom edge of the table and the "C" clamp.

WARNING: For your own safety
1. **Do not "Backup" (reverse feeding) while resawing because this could cause a kickback.**
2. **Make first pass to a depth slightly more than one half the width of the board.**
3. **Keeping the same face of board against the fence rotate it end over end and make the second pass.**

WARNING: For your own safety, install blade guard immediately upon completion of the resawing operation.



Using Carbide Tipped Blades

WARNING: To reduce the risk of cutting tool failure and thrown shrapnel (broken pieces of blade) read and understand all the warnings and instructions which come with carbide tipped blades. Failure to heed all carbide tipped blade warnings and safety instructions can result in serious injury.

Carbide is a very hard but brittle material. Take care when mounting, using and storing carbide blades to prevent accidental damage. Slight shocks, such as striking a tip during handling, can seriously damage the blade. Foreign objects in the work-piece, such as wire or nails, can also cause tips to crack or break off.

Before using a carbide tipped blade, always examine the blade and tips for damage. Look for bent teeth, a bent blade, cracks, broken, missing or loose carbide tips. Do not use a carbide tipped blade if damage is found or suspected.

Do not use a carbide tipped blade without all appropriate guards in place.

Mount blade securely in proper rotation direction.

Never rotate a carbide tipped blade faster than its maximum recommended speed.

Dadoing

Dadoing is cutting a groove into the work-piece. There are a wide variety of dado heads available - be sure and consult the specific instructions included with your dado head.

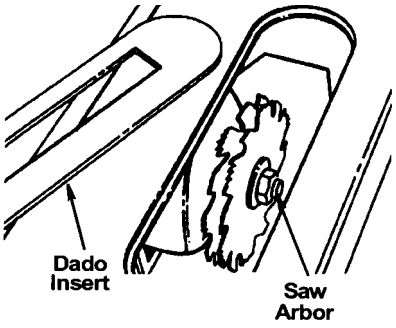
WARNING: For your own safety; always read, understand and follow all directions in the instructional booklet furnished with the dado head.

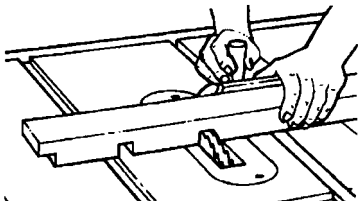
The slot provided for the saw blade in the regular table insert is too small for the dado head to pass through. Therefore, either a special dado insert must be purchased or a Zero Clearance Table Insert may be used.

WARNING: For your own safety, always use dado insert when using a dado blade.

A dado is never used for thru-sawing or cutting completely through a workpiece. It is used for non-thru sawing, cutting part way into the workpiece. Therefore, the blade guard and spreader cannot be used and must be removed. Use caution. Use miter gauge, rip fence, featherboards, or push sticks as required.

WARNING: For your own safety, always replace the blade, table insert, guard and spreader when you are finished dadoing.





Basic Saw Operations (continued)

The dado head is assembled to the saw arbor in the same manner as the saw blade. The arbor on the saw, is long enough so that the widest cut that can be made is 13/16" wide. It is not necessary to install the outside loose collar before screwing on the arbor nut. Make sure the arbor nut is tight.

When cutting a “deep” dado or a wide groove it is necessary to remove only a small amount of material (1/8"-1/4") at a time. Continue to increase dado elevation until the desired depth is reached.

Rabbeting

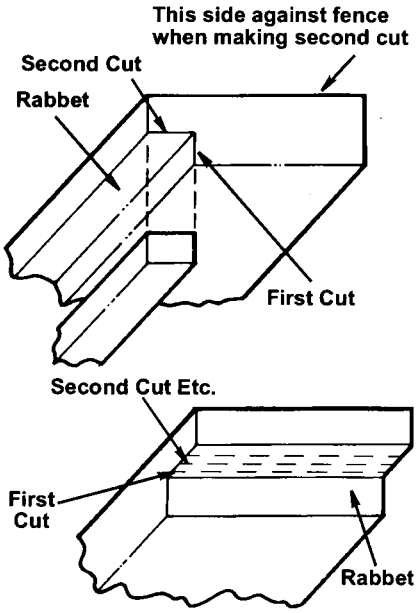
Rabbeting is known as cutting out a section of the corner of a piece of material, across an end or along an edge.

To make a rabbet requires cuts which do not go all the way through the material. Therefore, the blade guard must be removed.

1. Remove blade guard.
2. For rabbeting along an edge (long way of workpiece) as shown add facing to rip fence approximately as high as the workpiece is wide. Adjust rip fence and blade to required dimensions; then make first cut with board flat on table as any rip (type) cut; make second cut with workpiece on edge. Follow all precautions, safety instructions, and operational instructions as for ripping, or rip type operations, including featherboards and push stick, etc.
3. For rabbeting across an end, for workpiece 10-1/2” and narrower, make the rabbet cut with the board flat on the table. Using the miter gauge fitted with a facing, follow the same procedures and instructions for cross cutting making successive cuts across the width of the workpiece to obtain the desired width of cut. Do not use the rip fence for rabbeting across the end.

Some rabbet cuts can also be made in one pass of the workpiece over the cutter using a dado head.

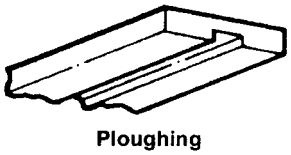
WARNING: For your own safety, install blade guard immediately upon completion of rabbeting operation.



Ploughing and Molding

Ploughing is grooving with the grain the long way of the workpiece, using the fence. Use featherboards and push sticks as required.

Molding is shaping the workpiece with the grain the long way of the workpiece, using the fence. Use featherboards and push sticks as required.

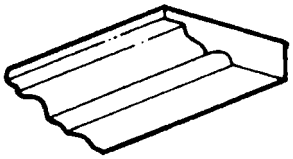


Ploughing

Molding

Molding is cutting a shape on the edge or face of the workpiece. With a molding head and a selection of different knife shapes it is possible for almost any kind of molding (base, cove, bead, etc.) to be produced.

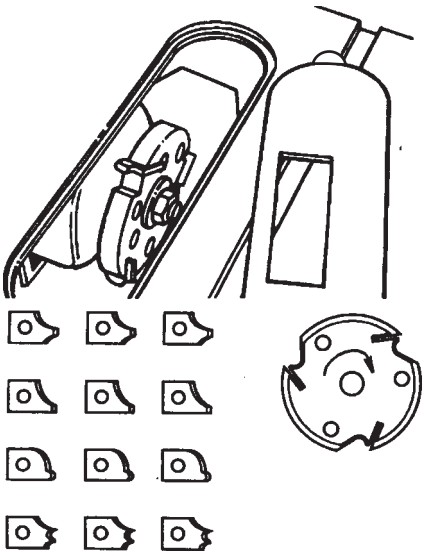
There are a wide variety of molding heads available as well as many different shapes of knives. Be sure and consult the specific instructions included with your molding head.



Molding

WARNING: For your own safety; always read, understand, and follow all directions in the instructional booklet furnished with the molding head.

The slot provided for the sawblade in the regular table insert is too small for the molding head to pass through. Therefore, a special metal molding insert (AC1040 - 8") must be purchased.



WARNING: For your own safety, always use molding insert listed under recommenced accessories.

When using the molding head it will be necessary to remove the blade guard and spreader. Use caution. Use miter gauge, fence, featherboards, or push sticks, etc., as required.

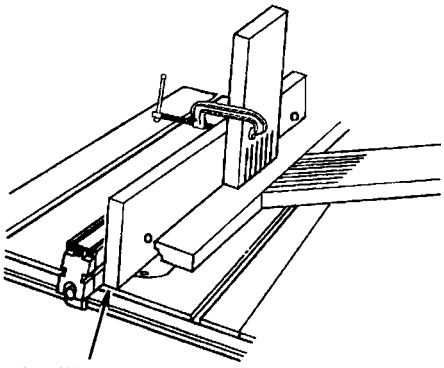
WARNING: For your own safety, always replace the blade, table insert, guard and spreader when you are finished molding.

A typical molding head is shown. The various shapes of knives are fitted into a groove in the cutterhead and secured with a screw(s).

The molding head is assembled to the saw arbor in the same manner as the saw blade. Make sure the arbor nut is tight.

It is necessary to use an auxiliary fence when shaping edges of a workpiece.

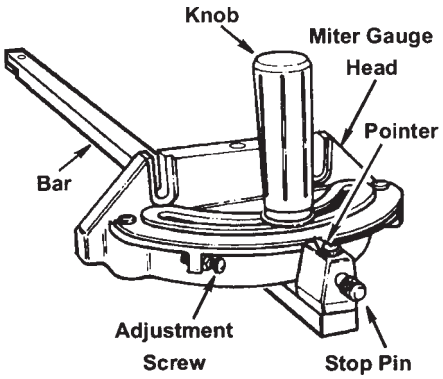
Position the auxiliary fence over the cutterhead with the cutter head below the surface of the saw table. Turn the saw "ON" and slowly raise the cutterhead. The cutterhead will then cut its own groove in the auxiliary fence.



Auxiliary Fence

Adjustments

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before making any adjustments.



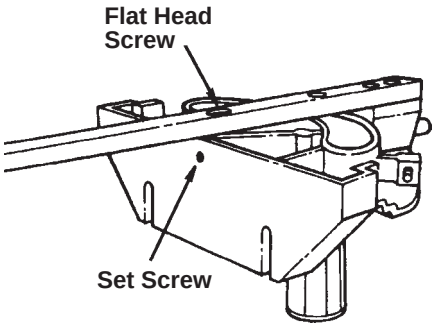
Miter Gauge

NOTE: The graduations are manufac-tured to very close tolerances which pro-vide ample accuracy for fine woodworking. In some cases where extreme accuracy is required, when making angle cuts, for example, make a trial cut and then recheck it.

There are adjustable screw stops for the stop pin at 0° and 45° right and left positions for conveniently setting the miter gauge to cut miters at these standard angles.

Adjusting Stop Screws

A. Loosen lock nut of screw for 0° stop.
B. Place 90° square against the miter gauge bar and the face of the miter gauge head.
C. If adjustment is needed loosen handle of miter gauge. Adjust miter gauge head flush to square. Tighten lock knob.
D. Adjust stop screw until it rests against the stop pin and tighten lock nut.
E. Adjust 45°, left and right using a 45° triangle or a protractor of a square using the above procedure.



The miter gauge head should swivel smoothly on the bar after the knob is loosened. To adjust this swivel movement:

A. Loosen the knob.
B. Loosen set screw with a 2.5mm hex wrench.
C. If the head is too loose turn the flat-head screw in a clockwise direction.

   If the head is too tight and will not swivel smoothly turn the flathead screw counterclockwise.
D. Tighten set screw.

Maintaining Your Table Saw

Maintenance

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before maintaining or lubricating your saw.

- Do not allow sawdust to accumulate inside the saw. Frequently blow out any dust that may accumulate inside the saw cabinet and the motor.
- Clean your cutting tools with a gum and pitch remover.
- The cord and the tool should be wiped with a dry clean cloth to prevent deterioration from oil and grease.
- A coat of automobile-type wax applied to the table will help to keep the surface clean and allow workpieces to slide more freely.
- If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

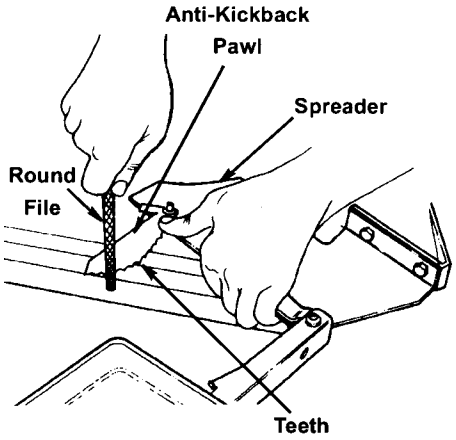
Anti-Kickback Pawls

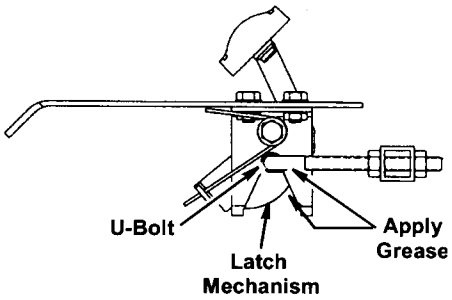
Make sure the teeth of the anti-kickback pawls are always sharp. To sharpen:

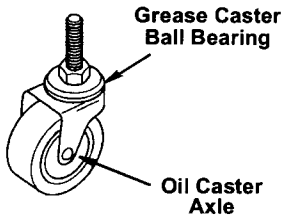
1. Remove blade guard.
2. Rotate pawl toward rear of spreader so that teeth are above top of spreader.
3. Hold spreader with left hand and place pawl over corner of workbench as shown.
4. Using a small round file (smooth cut) sharpen the teeth.
5. Reinstall blade guard

Herc-U-Lift™ Caster System

Periodically clean and grease U-bolt and latch mechanism as needed. Grease caster ball bearings and oil caster axle as needed.



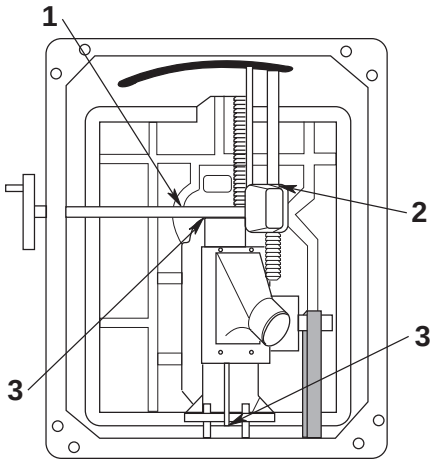


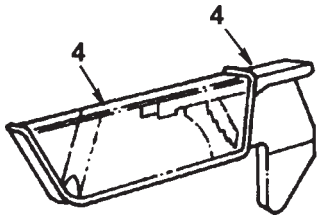


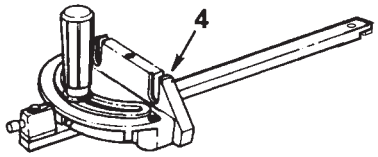
Lubrication

The saw motor bearings have been packed at the factory with proper lubricant. See motor label for lubrication instructions. The following parts should be oiled occasionally with SAE no. 20 or no. 30 engine oil.

1. Tilt screw threads and pivot nut. (First clean with a solvent recommended for gum and pitch removal.)
2. Elevation screw threads and pivot nuts. (First clean with a solvent recommended for gum and pitch removal).
3. Cradle bearing points.
4. Bearing points in blade guard and miter gauge.







RIDGID Recommends the Following Accessories

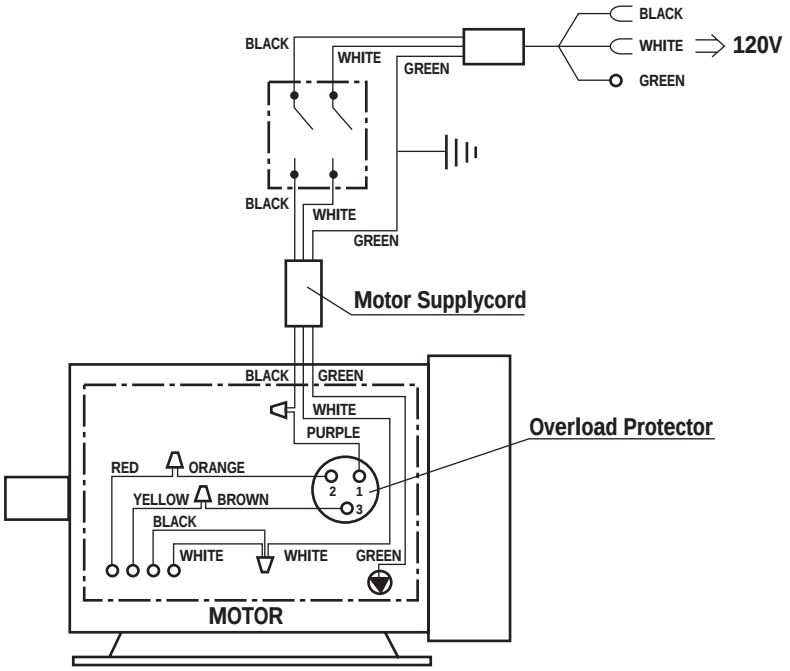
Item	SKU No.
Miter Gauge Hold Down	AC1022
Molding/Dado Insert for 8"	AC1040
Zero Clearance Insert	AC1045
Flip Top Portable Work Support	AC9933

Do not use any accessory unless you have received and read complete instructions for its use.

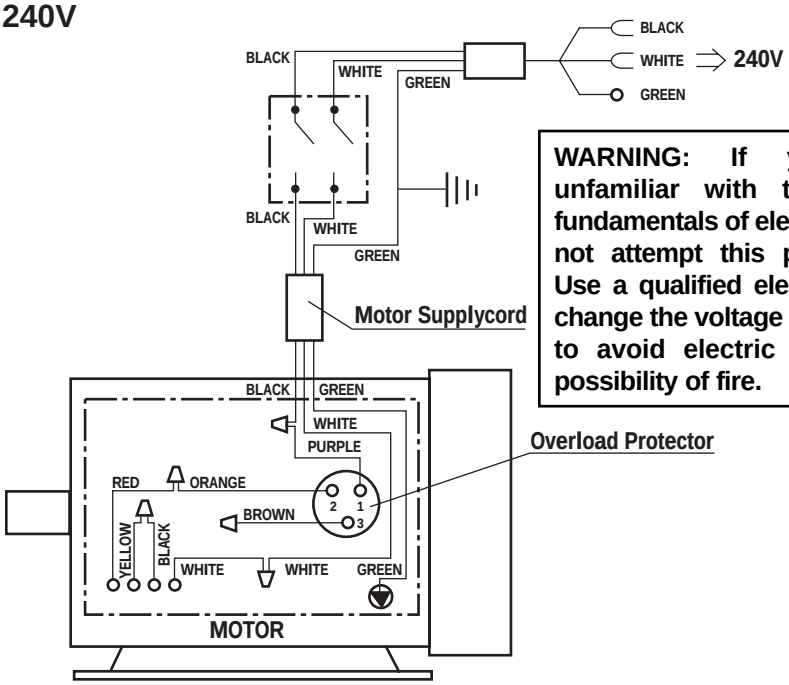
WARNING: Use only accessories recommended for this saw. Using other accessories may be dangerous.

120 V and 240V Wiring Diagrams

120V



240V



WARNING: If you are unfamiliar with the basic fundamentals of electricity, do not attempt this procedure. Use a qualified electrician to change the voltage of the saw to avoid electric shock or possibility of fire.

Troubleshooting

WARNING: For your own protection, turn switch "OFF" and always remove plug from power source outlet before troubleshooting.

General

Trouble	Probable Cause	Remedy
Excessive Vibration	1. Blade out of balance	1. Discard blade and use a different blade.
Cannot make square cut when crosscutting.	1. Miter gauge not adjusted properly.	1. See "Adjustments" section "Miter Gauge."
Cut binds, burns or stalls motor when ripping.	1. Dull blade or improper tooth set. 2. Blade is heeling. 3. Warped, cupped or twisted board. 4. Rip fence not parallel to blade. 5. Spreader out of alignment.	1. Sharpen or replace blade. 2. See "Adjustments" section, "Heeling Adjustment". 3. Consider cutting from other side or use a jig or fixture to make stable. To reduce the risk of kickback the board must be made stable and not rock or tip during cutting. If the board can not be held stable discard board. 4. See "Assembly" section, "Aligning Rip Fence." 5. See "Assembly" section, "Installing Blade Guard."
Cut not true at 90° or 45° positions.	1. Stop collars not properly adjusted.	1. See "Adjustment" section, "Blade Tilt, or squareness of blade to table.
Tilt and elevating handwheel turn hard.	1. Sawdust on threads of tilt screw or elevating screw. 2. Bearing retainer too tight.	1. See "Maintenance" and "Lubrication" sections. 2. See "Assembly" section, "Checking Tilt Mechanism"

Troubleshooting

Motor

NOTE: Motors used on wood working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "Vacuumed" frequently to prevent interference with normal motor ventilation.

Trouble	Probable Cause	Remedy
Excessive Noise	1. Motor	1. Have motor checked by qualified service technician. Repair service is available at your nearest Authorized Service Center.
Motor fails to develop full power. **NOTE:** Low Voltage: (Power output of motor decreases rapidly with decrease in voltage at motor terminals. For example, a reduction of 10% in voltage causes a reduction of 19% in maximum power output of which the motor is capable, and a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	1. Circuit overloaded with lights, appliances and other motors. 2. Undersize wires or circuit too long. 3. General overloading of power company facilities. (In some sections of the country, demand for electrical power may exceed the capacity of existing generating and distribution systems.) 4. Incorrect fuses of circuit breakers in power line.	1. Do not use other appliances or motors on same circuit when using the saw. 2. Increase wire sizes, or reduce length of wiring. See "Motor Specifications and electrical Requirements" section. 3. Request a voltage check from the power company. 4. Install correct fuses or circuit breakers.
Motor starts slowly or fails to come up to full speed	1. Low voltage. 2. Windings burned out or open. 3. Starting switch not operating	1. Request voltage check from the power company. 2. Have motor repaired or replaced. 3. Have switch replaced.
Motor overheats	1. Motor overloaded	1. Feed work slower into blade.

Troubleshooting

Motor (continued)

Trouble	Probable Cause	Remedy
Starting switch in motor will not operate	1. Burned switch contacts (due to extended hold-in periods caused by low line voltage, etc.) 2. Shorted capacitor (when equipped) 3. Loose or broken connections.	1. Have switch replaced and request a voltage check from the power company. 2. Have capacitor tested and replace if defective. 3. Have wiring checked and repaired.
Motor stalls (resulting in blown fuses or tripped circuit breakers)	1. Starting switch not operating. 2. Voltage too low to permit motor to reach operating speed. 3. Fuses or circuit breakers do not have sufficient capacity.	1. Have switch replaced. 2. Request voltage check from the power company. 3. Install proper size fuses or circuit breakers.
Frequent opening of fuses or circuit breakers	1. Motor overloaded 2. Fuses or circuit breakers do not have sufficient capacity. 3. Starting switch not operating (motor does not reach speed.)	1. Feed work slower into blade. 2. Install proper size fuses or circuit breakers. 3. Have switch replaced.

Notes

RIDGID®

RIDGID® HAND HELD AND STATIONARY POWER TOOL LIMITED THREE YEAR WARRANTY AND 90 DAY SATISFACTION GUARANTEE POLICY

This product is manufactured under license from Ridgid, Inc. by One World Technologies, Inc.. All warranty communications should be directed to One World Technologies, Inc. at (toll free) 1-866-539-1710.

90-Day Satisfaction GuaranteePolicy

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this Ridgid® tool for any reason, you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the three year warranty period.

What is covered under the Limited Three Year Warranty

This warranty covers all defects in workmanship or materials in this RIDGID® tool for the three year period from the date of purchase. This warranty is specific to this tool. Warranties for other RIDGID® products may vary.

How to obtain service

To obtain service for this RIDGID® tool you must return it, freight prepaid, to an authorized RIDGID® service center for hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll free) 1-866-539-1710 or by logging on to the RIDGID® website at www.ridgidwoodworking.com. When requesting warranty service, you must present the proof of purchase documentation, which includes a date of purchase. The authorized service center will repair any faulty workmanship, and either repair or replace any defective part, at our optioon at no charge to you.

What is not covered

This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than authorized RIDGID® service center for hand held and stationary power tools. One World Technoligies, Inc. makes no warranties, representations or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

Additional Limitations

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. is not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Catalog No. TS3650
Model No TS36500 Serial No. _____

The model and serial numbers may be found on a plate attached to the saw at the rear of the miter saw base. You should record both model and serial number in a safe place for future use.

QUESTIONS OR COMMENTS?
CALL 1-866-539-1710
www.ridgidwoodworking.com
Please have your Model Number and Serial Number on hand when calling.

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Part No. SP6498 Form No. SP6498 Printed in Taiwan 06/03